Water Resources Data
Arizona
Water Year 1988

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AZ-88-1

Prepared in cooperation with the State of Arizona
and with other agencies

U.S. DEPARTMENT OF THE INTERIOR
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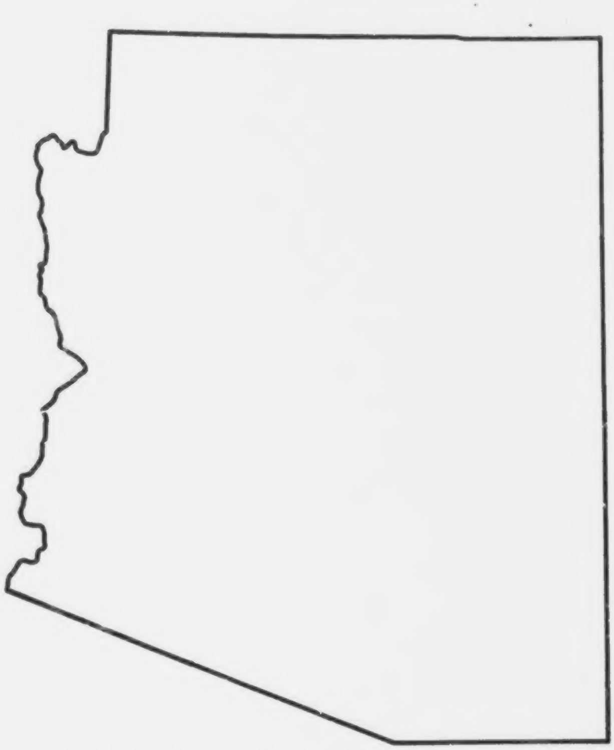
Water Resources Data Arizona
Water Year 1988

by F.C. Boner, W.B. Garrett, and A.D. Konieczki



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Prepared in cooperation with the State of Arizona
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UNITED STATES DEPARTMENT OF THE INTERIOR

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District Chief, Water Resources Division
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Tucson, Arizona 85701-1393

1989

PREFACE

This volume of the annual hydrologic data report of Arizona is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources.

This report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. In addition to the authors, who had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines, the following individuals contributed significantly to the collection, processing, and tabulation of the data:

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This report was prepared in cooperation with the State of Arizona and with other agencies under the general supervision of R. D. Mac Nish, District Chief, Arizona.

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16. Abstract

Water discharge data for the 1988 water year for Arizona consist of records of stage, discharge, and water quality of streams; stage, contents, water quality of laeks and reservoirs; water levels of observation wells; and quality of ground water. This report contains discharge records for 169 gaging stations, annual peaks for 24 crest-stage partial-record stations, and discharge measurements at 5 miscellaneous sites; contents only records for 9 lakes and reservoirs; stage and contents for 1 lake; elevation only for 1 streamflow station; 20 supplementary records, included with gaging-station records, consisting of monthend or monthly stage, contents, and evaporation of lakes and reservoirs, diversions, and return flows; water-quality records for 39 continous-record stations and 7 miscellaneous sites; water levels for 1,585 observation wells; and water-quality data for water from 276 wells. The data represent that part of the National Water Data System operated by the U.S. Geological Survey cooperating Federal and State Agencies in Arizona.

17a. Descriptors
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[Letters after station name designate type of data: (c) chemical; (d) discharge; (e) elevation; (g) gage height; (m) microbiological (bacteria); (p) pesticide; (q) specific conductance (daily); (r) radio-chemical; (s) suspended sediment; (t) water temperature (daily); (v) contents]

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WATER RESOURCES DATA FOR ARIZONA, WATER YEAR 1988

INTRODUCTION

Water resources data for the 1988 water year for Arizona consist of records of stage, discharge, and water quality of streams; stage and contents of lakes and reservoirs; measurements of ground-water levels; and quality of water from selected wells. Also included are discharge data for crest-stage partial-record stations and water-quality data for partial-record stations. Locations of the gaging stations are shown in figures 4, 6, and 7, and of water-quality stations in figures 5 and 6. Additional water data were collected at various sites, which are not part of the systematic data-collection program, and are published as miscellaneous measurements or miscellaneous water-quality analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Arizona.

Records of discharge or stage of streams and contents or stage of lakes and reservoirs were first published in a series of U.S. Geological Survey water-supply papers entitled "Surface Water Supply of the United States." These water-supply papers were in an annual series through water year 1960 and then in a 5-year series for 1961-65 and 1966-70. Records of chemical quality, water temperatures, and suspended sediment were published from 1941 to 1970 in an annual series of water-supply papers entitled "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1935 to 1974 in a series of water-supply papers entitled "Ground-Water Levels in the United States." Water-supply papers may be consulted in the libraries of the University of Arizona, Arizona State University, and the State of Arizona in Phoenix; principal cities in the United States; or may be purchased from the U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, Colorado 80225.

For water years 1961-74, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. For water years 1964-74, water-quality records were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1975 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report AZ-88-1." Water-data reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia, 22161.

Information for ordering specific reports and data retrievals may be obtained from the district chief at the address given on the back of the title page or by telephone (602) 629-6671, FTS 762-6671.

NATIONAL WATER INFORMATION SYSTEM

Several components of the National Water Information System (NWIS) were installed on the Arizona District computer. Many of the data published in this report and much additional information can be retrieved from the data bases. The Ground Water Site Inventory (GWSI) data base contains station numbers, well and miscellaneous site numbers, local well numbers, locations, and other descriptive data for all Geological Survey data-collection sites. GWSI contains most of the data collected for wells except for chemical analyses. The Automated Data Processing System (ADAPS) contains most surface-water data except for site descriptions and chemical analyses. The Water Quality Data Processing System (QW) contains chemical analyses of water from ground-water and surface-water sites.

Data retrievals from the three data bases are available at cost on paper or nine-track computer tape. Some of the retrievals produce data in a format suitable for machine reading that does not contain blank lines or page headers.

COOPERATION

The U.S. Geological Survey and organizations of the State of Arizona have had cooperative agreements for the systematic collection of surface-water records since 1912, for ground-water levels since 1939, and for water-quality records since 1969. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Arizona Department of Environmental Quality, G. Teletzke, director through June 1988, R. L. Miller, acting director thereafter.
Arizona Department of Water Resources, C. L. Linser, acting director.
City of Tucson, T. J. Volgy, mayor, J. D. Valdez, manager.
Flood Control District of Maricopa County, D. E. Sagramoso, chief engineer and general manager.
Gila Valley Irrigation District, S. L. Pace, president.
Maricopa County Municipal Water Conservation District No. 1, H. S. Raymond, president, and J. A. Falbo, general-manager.
Metropolitan Water District of Southern California, Carl Boronkay, general manager.
Pima County Flood Control District, Sam Lena, chairman, board of directors.
Salt River Valley Water Users' Association, John R. Lassen, president, and David S. Wilson, associate general manager-water.
San Carlos Irrigation and Drainage District, E. R. Wildermuth, president.
Show Low Irrigation Company, Chester Adams, secretary-treasurer.

Assistance in the form of funds or services was given by the Bureau of Land Management, Bureau of Reclamation, and National Park Service, U.S. Department of the Interior; by the Corps of Engineers, U.S. Army; by the Forest Service, U.S. Department of Agriculture; by the International Boundary and Water Commission, U.S. Department of State; and by the Federal Power Commission. Assistance in collecting records was furnished by the Arizona Public Service Co. Organizations that supplied data are acknowledged in station descriptions.

HYDROLOGIC CONDITIONS

As is common in Arizona, streamflow varied greatly in the 1988 water year--from month to month throughout the year and from place to place in the State. The variations are related to differences in precipitation, temperature, topography, and geology. The yearly discharge at six key gaging stations ranged from 118 to 216 percent of the median of yearly discharges. The median of the yearly discharges is defined as the middle value of discharge when arranged in order of size. For the index stations, the median is computed from the yearly discharges for the 1951-80 period of record.

The yearly discharge for the 1988 water year was excessive at one index station and within the normal range at five stations. Excessive discharge is defined as a discharge greater than the 75 percent quartile, i.e., greater than 75 percent of the values arranged in order of magnitude; deficient discharge is less than the 25 percent quartile.

The yearly discharge for the 1988 water year and the relation to the median of yearly discharges for the period 1951-80 for the six index gaging stations are given below.

Station	Discharge (acre-feet)	Percent of median
Little Colorado River near Cameron	181,100	122
Virgin River at Littlefield	190,200	164
Gila River at head of Safford Valley, near Solomon	428,600	*216
San Pedro River at Charleston	30,330	118
Salt River near Roosevelt	640,600	176
Verde River below Tangle Creek, above Horseshoe Dam	457,800	149

*Excessive

The discharge of the Colorado River near Grand Canyon was 8,606,000 acre-ft; the flow of the Colorado River at this point is affected by storage in upstream reservoirs, and this gaging station is no longer used as an index station.

The discharge of the San Pedro River at Charleston was 30,330 acre-ft for the 1988 water year, which is about 89 percent of the median flow for the period of record, 1905, 1913-88. The San Pedro River is a stream that is subject to large variations in flow--from place to place along the river and from time to time. For example, the flow for 1962 was only about 38 percent of median but for 1926 was about 353 percent of median.

Storage decreased in three of the major reservoirs and increased in two during the 1988 water year. Change in contents during the year and percentage of average contents on September 30 for the period of record for several reservoirs are given below.

Reservoir	Change in contents, 1988 water year (acre-feet)	Average contents on September 30 (percent)
Lake Powell	-356,000	---
Lakes Mead-Mohave	-1,500,000	117
San Carlos Reservoir.......	-96,000	216
Salt-Verde system	+66,000	202
Lake Pleasant	+19,600	178

Diversions of streamflow for irrigation of Arizona lands in the 1988 water year was 3,663,000 acre-ft. About 2,272,000 acre-ft was diverted from the Colorado River for use by the Colorado River Indian Reservation, the Gila Project, and the Yuma Project. About 550,000 acre-ft of the water diverted from the Colorado River was returned to the river or was discharged across the Arizona-Sonora international boundary. About 1,391,000 acre-ft of streamflow was diverted from the Gila River basin for use in Safford Valley, the San Carlos Project, and the Salt River Project.

Figure 1 shows the discharge for the 1988 water year compared with the median runoff for the period 1951-80 at three representative gaging stations for which long-term records are available.

DEFINITION OF TERMS

Terms related to streamflow, water quality, and other hydrologic data, as used in this report, are defined below. See also the table "Factors for conversion of inch-pound units to International System (SI) Units" on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons, or 1,233 cubic meters.

Algae are mostly aquatic single-celled, colonial, or multicelled plants, containing chlorophyll and lacking roots, stems, and leaves.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

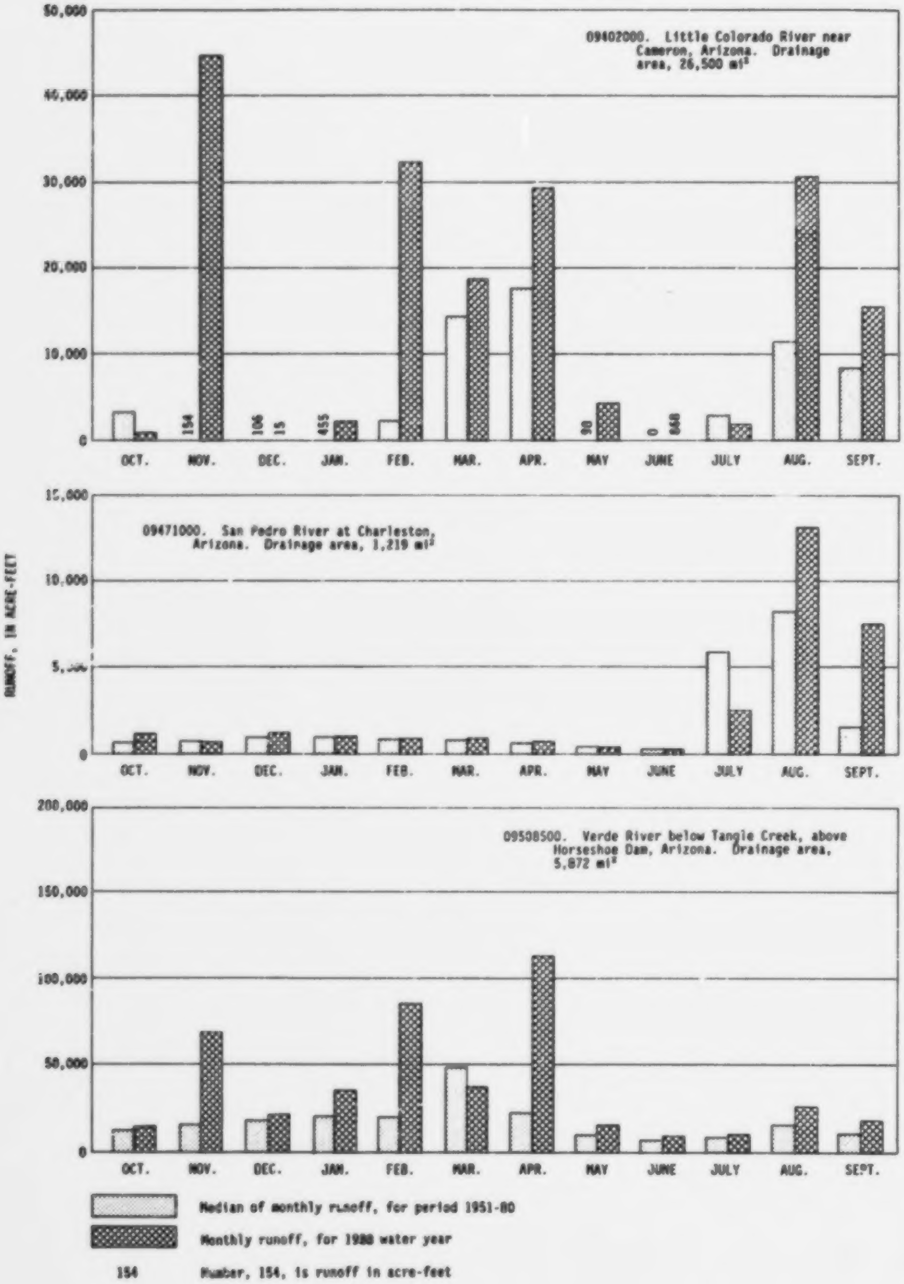


Figure 1.--Runoff during 1988 water year compared with median runoff for period 1951-80 for three representative gaging stations.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria, which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C±1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the intestines or feces of warmblooded animals. They are often used as indicators of the sanitary quality of the water. In the laboratory they are defined as all organisms that produce blue colonies within 24 hours when incubated at 44.5°C±0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestines of warmblooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as Gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C±1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as numbers of colonies per 100 mL of sample.

Bed material is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Biomass is the amount of living matter present at any given time, expressed as the mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500°C for 1 hour. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

Dry mass refers to the mass of residue present after drying in an oven at 105°C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry mass values are expressed in the same units as ash mass.

Organic mass or volatile mass of the living substance is the difference between the dry mass and the ash mass, and represents the actual mass of the living matter. The organic mass is expressed in the same units as for the ash mass and dry mass.

Wet mass is the mass of living matter plus contained water.

Bottom material: See Bed material.

Cells/volume refers to the number of cells of any organism that are counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Chemical oxygen demand (COD) is a measure of the chemically oxidizable material in the water, and furnishes an approximation of the amount of organic and reducing material present. The determined value may correlate with natural water color or with carbonaceous organic pollution from sewage or industrial wastes.

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic foot per second (ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic foot per second-day ($(ft^3)/d$) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 μm membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically or by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log_2 \frac{n_i}{n}$$

where n_i is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area are given herein include all closed basins, or noncontributing areas within the area unless otherwise noted.

Drainage basin is a part of the surface of the Earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water, together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations and is exparessed as the equivalent concentration of calcium carbonate ($CaCO_3$).

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an 8-digit number.

Land-surface datum (lad) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Micrograms per gram (μg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per liter (UG/L, μg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represent the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L and is based on the mass of dry sediment per liter of water-sediment mixture.

Miscellaneous site is a location other than continuous- or partial-record stations where random discharge measurements are made or samples are collected to give better areal coverage of unusual flow events or water-quality conditions in a river basin.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

Organism is any living entity, such as an insect, phytoplankten, or zooplankten.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliters (mL) or liters (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of a particle determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with the recommendation made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay	0.00024 - 0.004	Sedimentation
Silt	.004 - .062	Sedimentation
Sand	.062 - 2.0	Sedimentation or sieve
Gravel	2.0 - 64.0	Sieve

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Percent composition is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, mass, or volume.

Periphyton is the assemblage of microorganisms attached to and living upon submerged solid surfaces. While primarily consisting of algae, they also include bacteria, fungi, protozoa, rotifers, and other small organisms.

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed "acidic," and solutions with a pH greater than 7 are termed "basic." Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Picocurie (PC, pCi) is one trillionth ($1x10^{-12}$) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields $3.7x10^{10}$ radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

> Phytoplankton is the plant part of the plankton. They are usually microscopic and their movement is subject to the water currents. Phytoplankton growth is dependent upon solar radiation and nutrient substances. Because they are able to incorporate as well as release materials to the surrounding water, the phytoplankton have a profound effect upon the quality of the water. They are the primary food producers in the aquatic environment, and are commonly known as algae.
>
> > Blue-green algae are a group of phytoplankton organisms having a blue pigment, in addition to the green pigment called chlorophyll. Blue-green algae often cause nuisance conditions in water.
> >
> > Diatoms are the unicellular or colonial algae having a siliceous shell. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.
> >
> > Green algae have chlorophyll pigments similar in color to those of higher green plants. Some forms produce algae mats or floating "moss" in lakes. Their concentrations are expressed as number of cells per milliliter (cells/mL) of sample.
>
> Zooplankton is the animal part of the plankton. Zooplankton are capable of extensive movements within the water column, and are often large enough to be seen with the unaided eye. Zooplankton are secondary consumers feeding upon bacteria, phytoplankton, and detritus. Because they are the grazers in the aquatic environment, the zooplankton are a vital part of the aquatic food web. The zooplankton community is dominated by small crustaceans and rotifiers.

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of only readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestive treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material, such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

> Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.
>
> Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).
>
> > Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.
>
> Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry weight or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft^3/s) x 0.0027.
>
> Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.
>
> Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Sodium-adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions with soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens per centimeter). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

> Natural substrates refers to any naturally occurring emersed or submersed solid surface, such as a rock or tree, upon which an organism lived.
>
> Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results. Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total." Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexageria
Species	Hexagenia limbata

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total." (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total in bottom material is the total amount of a given constituent in a representative sample of bottom material. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total in bottom material."

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Turbidity of a sample is the reduction of transparency due to the presence of particulate matter. In this report it is expressed in Nephelometric turbidity units (NTU), obtained from the Nephelometric method for turbidity determination which measures the intensity of light scattered by suspended particles at 90° from the path of incident light source.

Water year in U.S. Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1988, is called the "1988 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports published before 1975 (WRD was used as an abbreviation for "Water-Resources Data" in reports prior to 1975).

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

DOWNSTREAM ORDER AND STATION NUMBERS

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a main-stream station are listed before that station. A station on a tributary that enters between two main-stream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary on which a station is situated with respect to the stream to which it is immediately tributary is indicated by an indention in a list of stations in the front of the report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

As an added means of identification, each hydrologic station and partial-record station has been assigned a station number. These are in the same downstream order used in this report. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete 8-digit number for each station such as 09402500, which appears just to the left of the station name, includes the 2-digit part number "09" plus the 6-digit downstream order number "402500."

NUMBERING SYSTEM FOR WELLS AND MISCELLANEOUS SITES

The 8-digit downstream order station numbers are not assigned to wells and miscellaneous sites where only random water-quality samples or discharge measurements are taken.

The well and miscellaneous site numbering system of the U.S. Geological Survey is based on the grid system of latitude and longitude. The system provides the geographic location of the well or miscellaneous site and a unique number for each site. The number consists of 15 digits. The first 6 digits denote the degrees, minutes, and seconds of latitude, the next 7 digits denote degrees, minutes, and seconds of longitude, and the last 2 digits (assigned sequentially) indentify the wells or other sites within a 1-second grid (see fig. 2). In addition to the well number based on latitude and longitude, a local well number is given based on the Gila and Salt River meridian and base line (see fig. 3). A different numbering system is used on the Navajo and Hopi Indian Reservations. The Navajo Indian Reservation is divided into 17 administrative districts, numbered 1 to 5 and 7 to 18, and the Hopi Indian Reservation comprises district 6. The area is further divided into 15-minute quadrangles arbitrarily numbered from 1 to 151 starting in the northeast corner of the area and numbering consecutively in rows from east to west. Within the 15-minute quadrangle the well is located in miles south and west from the northeast corner of the quadrangle. The first two numbers in the well number represent the district, the next three numbers are the quadrangle, the decimal numbers are miles west by (X) miles south of the northeast corner of the quadrangle. Thus, the number 02 021-05.28X10.68 states that the well is in district 2, quadrangle 21, and is 5.28 miles west by 10.68 miles south of the northeast corner of the quadrangle.

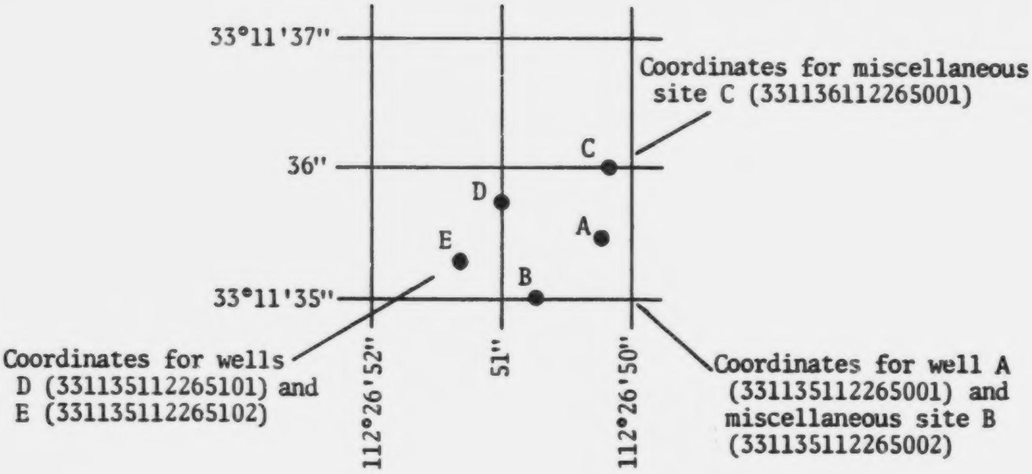
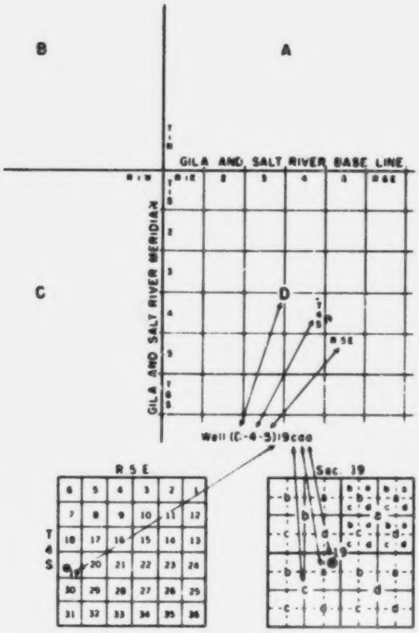

33°11'37"
36"
33°11'35"
112°26'52"
51"
112°26'50"
A
B
C
D
E
Coordinates for miscellaneous site C (331136112265001)
Coordinates for wells D (331135112265101) and E (331135112265102)
Coordinates for well A (331135112265001) and miscellaneous site B (331135112265002)

Figure 2.--System for numbering wells and miscellaneous sites (latitude and longitude)



The well numbers used by the Geological Survey in Arizona are in accordance with the Bureau of Land Management's system of land subdivision. The land survey in Arizona is based on the Gila and Salt River meridian and base line, which divide the State into four quadrants. These quadrants are designated counterclockwise by the capital letters A, B, C, and D. All land north and east of the point of origin is in A quadrant, that north and west in B quadrant, that south and west in C quadrant, and that south and east in D quadrant. The first digit of a well number indicates the township, the second the range, and the third the section in which the well is situated. The lowercase letters a, b, c, and d after the section number indicate the well location within the section. The first letter denotes a particular 160-acre tract, the second the 40-acre tract, and the third the 10-acre tract. These letters also are assigned in a counterclockwise direction, beginning in the northeast quarter. If the location is known within the 10-acre tract, three lowercase letters are shown in the well number. In the example shown, well number (D-4-5)19caa designates the well as being in the NE¼NE¼SW¼ sec. 19, T. 4 S., R. 5 E. Where more than one well is within a 10-acre tract, consecutive numbers beginning with 1 are added as suffixes.

Figure 3.--Well-numbering system in Arizona.

SPECIAL NETWORKS AND PROGRAMS

Some of the stations for which data are published in this report are included in special networks and programs. These stations are identified by their title, set in parentheses, under the station name.

Hydrologic bench-mark station is one that provides hydrologic data for a basin in which the hydrologic regimen will likely be governed solely by natural conditions. Data collected at a bench-mark station may be used to separate effects of natural from manmade changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped bench-mark basin. Included in this program in Arizona is station 09508300, Wet Bottom Creek near Childs.

National stream-quality accounting network (NASQAN) is a data collection network designed by the U.S. Geological Survey to meet many of the information demands of agencies or groups involved in national or regional water-quality planning and management. Both accounting and broad-scale monitoring objectives have been incorporated in the network design. Areal configuration of the network is based on river-basin accounting units (identified by 8-digit hydrologic-unit numbers) designated by the Office of Water Data Coordination in consultation with the Water Resources Council. Primary objectives of the network are (1) to depict areal variability of streamflow and water-quality conditions nationwide on a year-by-year basis and (2) to detect and assess long-term changes in streamflow and stream quality. The stations included in this network in Arizona are labeled in the text of this report.

Arizona fixed station network is part of the State water-pollution control program and includes a network of water-quality stations that build upon the NASQAN network. This network provides essential data for State water-quality assessment programs including the biennial report required by the Federal Clean Water Act. Included in this network of nine stations are six NASQAN stations with expanded parametric coverage. The stations are: 09380000, Colorado River at Lees Ferry (expanded NASQAN); 09427520, Colorado River below Parker Dam; 09466500, Gila River at Calva (expanded NASQAN); 09498500, Salt River near Roosevelt (expanded NASQAN); 09502000, Salt River below Stewart Mountain Dam; 09508500, Verde River below Tangle Creek, above Horseshoe Dam (expanded NASQAN); 09510000, Verde River below Bartlett Dam; 09518000, Gila River above diversions, at Gillespie Dam (expanded NASQAN); and 09522000, Colorado River at northerly international boundary, above Morelos Dam, near Andrade, CA (expanded NASQAN).

Pesticide program is a network of regularly sampled water-quality stations where samples are collected to determine the concentration and distribution of pesticides in streams where potential contamination could result from the application of the commonly used insecticides and herbicides. Operation of the network is a Federal interagency activity, however, there were no Arizona stations operated in this network during 1988.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radio-isotopes. The streams that are sampled represent major drainage basins in the conterminous United States. Included in this network in Arizona are stations 09522000, Colorado River at Northerly International Boundary above Morelos Dam, near Andrade, CA.; and 09508300, Wet Bottom Creek near Childs.

Tritium network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States. Included in this network in Arizona is station 09429490, Colorado River above Imperial Dam, AZ-CA.

EXPLANATION OF STAGE AND WATER-DISCHARGE RECORDS

Collection and computation of data

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams or canals, and stage, surface area, and contents of lakes or reservoirs. In addition, observations of factors affecting the stage-discharge relation or the stage-capacity relation, weather records, and other information are used to supplement base data in determining the daily flow or volume of water in storage. Records of stage are obtained from either direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geographical Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A-6.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

At some stream-gaging stations the stage-discharge relation is affected by backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

At some stream-gaging stations the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed on the basis of the gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For a lake or reservoir station, capacity tables giving the contents for any stage are prepared from stage-area relation curves defined by surveys. The application of the stage to the capacity table gives the contents, from which the daily, monthly, or yearly change in contents is computed.

If the stage-capacity curve is subject to changes because of deposition of sediment in the reservoir, periodic resurveys of the reservoir are necessary to define new stage-capacity curves. During the period between reservoir surveys the computed contents may be increasingly in error due to the gradual accumulation of sediment.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Likewise daily contents may be estimated on the basis of operator's log, prior and subsequent records, inflow-outflow studies, and other information.

Publication of data

The data in this report generally comprise a description of the station and tabulations of daily and monthly figures. For gaging stations on streams or canals a table showing the daily discharge and monthly and yearly discharge is given. For gaging stations on lakes or reservoirs a monthly summary table of stage and contents or a table showing the daily contents is given. Tables of daily mean gage heights are included for some streamflow stations and for some reservoir stations. Records are published for the water year, which begins on October 1 and ends on September 30.

The description of the gaging station gives the location, drainage area, period of record, notations of revisions of previously published records, type and history of gages, general remarks, average discharge, and extremes of discharge or contents. The location of the gaging station and the drainage area are obtained from the most accurate maps available. River mileage, given under "LOCATION" for some stations, is that determined and used by the Corps of Engineers or other agencies. Periods for which there are published records for the present station or the stations generally equivalent to the present one are given under "PERIOD OF RECORD."

Previously published streamflow records of some stations have been found to be in error on the basis of data or information later obtained. Revisions of such records are usually published along with the current records in one of the annual or compilation reports. In order to make it easier to find such revised records, a paragraph headed "REVISED RECORDS" has been added to the description of all stations for which revised records have been published. Listed therein are all the reports in which revisions have been published, each followed by the water years for which figures are revised in that report. In listing the water years only one number is given; for instance, 1933 stands for the water year October 1, 1932, to September 30, 1933. If no daily, monthly, or annual figures of discharge were affected by the revision, the fact is brought out by notations after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the revised figure was first published is given. It should be noted that for all stations for which cubic feet per second per square mile and runoff in inches are published, a revision of the drainage area necessitates corresponding revision of all figures based on the drainage area. Revised figures of cubic feet per second per square mile and runoff in inches resulting from a revision of the drainage area only are usually not published in the annual series of reports.

The type of gage currently in use; the datum of the present gage referred to National Geodetic Vertical Datum of 1929; and a condensed history of the types, locations, and datums of previous gages used during the period of record are given under "GAGE." National Geodetic Vertical Datum of 1929 is explained in "Definition of Terms."

Information pertaining to the accuracy of the discharge records and to conditions which affect the natural flow of the gaging station is given under "REMARKS." For reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir is given under "REMARKS."

The average discharge for the number of years indicated is given under "AVERAGE DISCHARGE"; it is not given for stations having fewer than 5 complete years of record or for stations where changes in water development during the period of record cause the figure to have little significance. In addition, the median of yearly mean discharges is given for stream-gaging stations having 10 or more complete years of record if the median differs from the average by more than 10 percent. Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a non-recording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

Skeleton rating tables are published, immediately following EXTREMES, for stream-gaging stations where they serve a useful purpose and the dates of applicability can be easily identified.

The daily table for stream-gaging stations gives the mean discharge for each day and is followed by monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (lined headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the drainage area includes large noncontributing areas, or if the average annual rainfall over the drainage basin is usually less than 20 inches. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

Footnotes to the table of daily discharge are introduced by the word "NOTE." Footnotes are used to indicate periods for which the discharge is computed or estimated by special methods because of no gage height record, backwater from various sources, or other unusual conditions. Periods of no gage-height record are indicated if the period is continuous for a month or more or includes the maximum discharge for the year. Periods of backwater from an unusual source, of indefinite stage-relation, or of any other unusual condition at the gage site are indicated only if they are a month or more in length and the accuracy of the records is affected. Days on which the stage-discharge relation is affected by ice are not indicated. The methods used in computing discharge for various unusual conditions have been explained in preceding paragraphs.

For most gaging stations on lakes and reservoirs the data presented comprise a description of the station and a monthly summary table of stage and contents. For some reservoirs a table showing daily contents or stage is given. A skeleton table of capacity at given stages is published for all reservoirs for which records are published on a daily basis, but is not published for reservoirs for which only monthly data are given.

Data collected at partial-record stations follow the information for continuous record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the tables of partial-record stations.

Accuracy of field data and computed results

The accuracy of streamflow data depends primarily on (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements, and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent; "good", within 10 percent; and "fair", within 15 percent. "Poor" means that daily discharges have less than "fair" accuracy.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to tenths between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the figure. The same rounding rules apply to discharge figures listed for partial-record stations.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions, for changes in contents of reservoirs, or for other changes incident to use and control. Evaporation from a reservoir is not included in the adjustments for change in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge cubic measurements, gage-height records, and rating tables is on file in the district office. Also most gaging-station records are available in computer-usable form and many statistical analyses have been made.

Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

Records of discharge collected by agencies other than the Geological Survey

The National Water Data Exchange, Water Resources Division, U.S. Geological Survey, National Center, Reston, Va. 22092, maintains an index of records of discharge not published by the Geological Survey. Information on records available at specific sites can be obtained upon request.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and examination of data

Surface-water samples for analyses usually are collected at or near gaging stations. The quality-of-water records are given immediately following the discharge records at these stations.

The descriptive heading for water-quality records gives the period of record for all water-quality data; the period of daily record for parameters that are measured on a daily basis (specific conductance, pH, dissolved oxygen, water temperature, sediment discharge, etc.); extremes for the period of daily record; extremes for the current year; and general remarks.

For ground-water records, no descriptive statements are given; however, the well number, depth of well, date of sampling and/or other pertinent data are given in the table containing the chemical analyses of the ground water.

Water analysis

Most methods for collecting and analyzing water samples are described in the U.S. Geological Survey Techniques of Water-Resources Investigations listed on a following page.

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the district office.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small daily temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, maximum, minimum, and mean temperatures for each day are published.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples where collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

EXPLANATION OF GROUND-WATER LEVEL RECORDS

Collection and publication of the data

Only ground-water level data from a basic network of observation wells are published herein. This basic network contains observation wells so located that the most significant data are obtained from the fewest wells in the most important aquifers.

Each well is identified by means of (1) a 15-digit number that is based on latitude and longitude (see figure 2) and (2) a local number that is provided for local needs (see figure 3).

Measurements are made in many types of wells, under varying conditions of access and at different temperatures, hence, neither the method of measurement nor the equipment can be standardized. At each observation well, however, the equipment and techniques used are those that will ensure that measurements at each well are consistent.

Water-level measurements in this report are given in feet with reference to land-surface datum (lsd). Land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum referenced to National Geodetic Vertical Datum of 1929 (NGVD) is given. National Geodetic Vertical Datum of 1929 is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada.

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error in determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or larger unit.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S. Geological Survey, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. Water temperature--influential factors, field measurement, and data presentation, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. Guidelines for collection and field analysis of ground-water samples for selected unstable constituents, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. Application of surface geophysics to ground-water investigations, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. Application of borehole geophysics to water-resources investigations, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. General field and office procedures for indirect discharge measurements, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. Measurement of peak discharge by the slope-area method, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. Measurement of peak discharge at culverts by indirect methods, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. Measurement of peak discharge at width contractions by indirect methods, by H. J. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 pages.

3-A5. Measurement of peak discharge at dams by indirect methods, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. General procedure for gaging streams, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. Stage measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3. Chapter A7. 1968. 28 pages.

3-A8. Discharge measurements at gaging stations, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

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3-A11. Measurement of discharge by moving-boat method, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A12. Fluorometric procedures for dye tracing, by J. F. Wilson, Jr., E. D. Cobb, and F. A. Kilpatrick: USGS--TWRI Book 3, Chapter A12. 1986. 41 pages.

3-A13. Computation of continuous records of streamflow, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. Use of flumes in measuring discharge, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. Computation of water-surface profiles in open channels, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

3-A16. Measurement of discharge using tracers, by F. A. Kilpatrick and E. D. Cobb: USGS--TWRI Book 3, Chapter A16. 1985. 52 pages.

3-A17. Acoustic velocity meter systems, by Antonius Laenen: USGS--TWRI Book 3, Chapter A17. 1985. 38 pages.

3-B1. Aquifer-test design, observation, and data analysis, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS--Continued

3-B2. Introduction to ground-water hydraulics, a programed test for self-instruction, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. Type curves for selected problems of flow to wells in confined aquifers, by J. E. Reed: USGS--TWRI Book 3, Chapter B3. 1980. 106 pages.

3-B5. Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems--An introduction, by O. L. Franke, T. E. Reilly, and G. D. Bennett: USGS--TWRI Book 3, Chapter B5. 1987. 15 pages.

3-B6. The principle of superposition and its application in ground-water hydraulics, by T. E. Reilly, O. L. Franke, and G. D. Bennett: USGS--TWRI Book 3, Chapter B6. 1987. 28 pages.

3-C1. Fluvial sediment concepts, by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

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4-A1. Some statistical tools in hydrology, by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. Frequency curves, by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

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4-B2. Storage analyses for water supply, by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. Regional analyses of streamflow characteristics, by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. Computation of rate and volume of stream depletion by wells, by C. T. Jenkins: USGS-TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. Methods for determination of inorganic substances in water and fluvial sediments, by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

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5-A6. Quality assurance practices for the chemical and biological analyses of water and fluvial sediments, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.

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6-A1. A modular three-dimensional finite-difference ground-water flow model, by M. G. McDonald and A. W. Harbaugh: USGS--TWRI Book 6, Chapter A1. 1988. 586 pages.

7-C1. Finite difference model for aquifer simulation in two dimensions with results of numerical experiments, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

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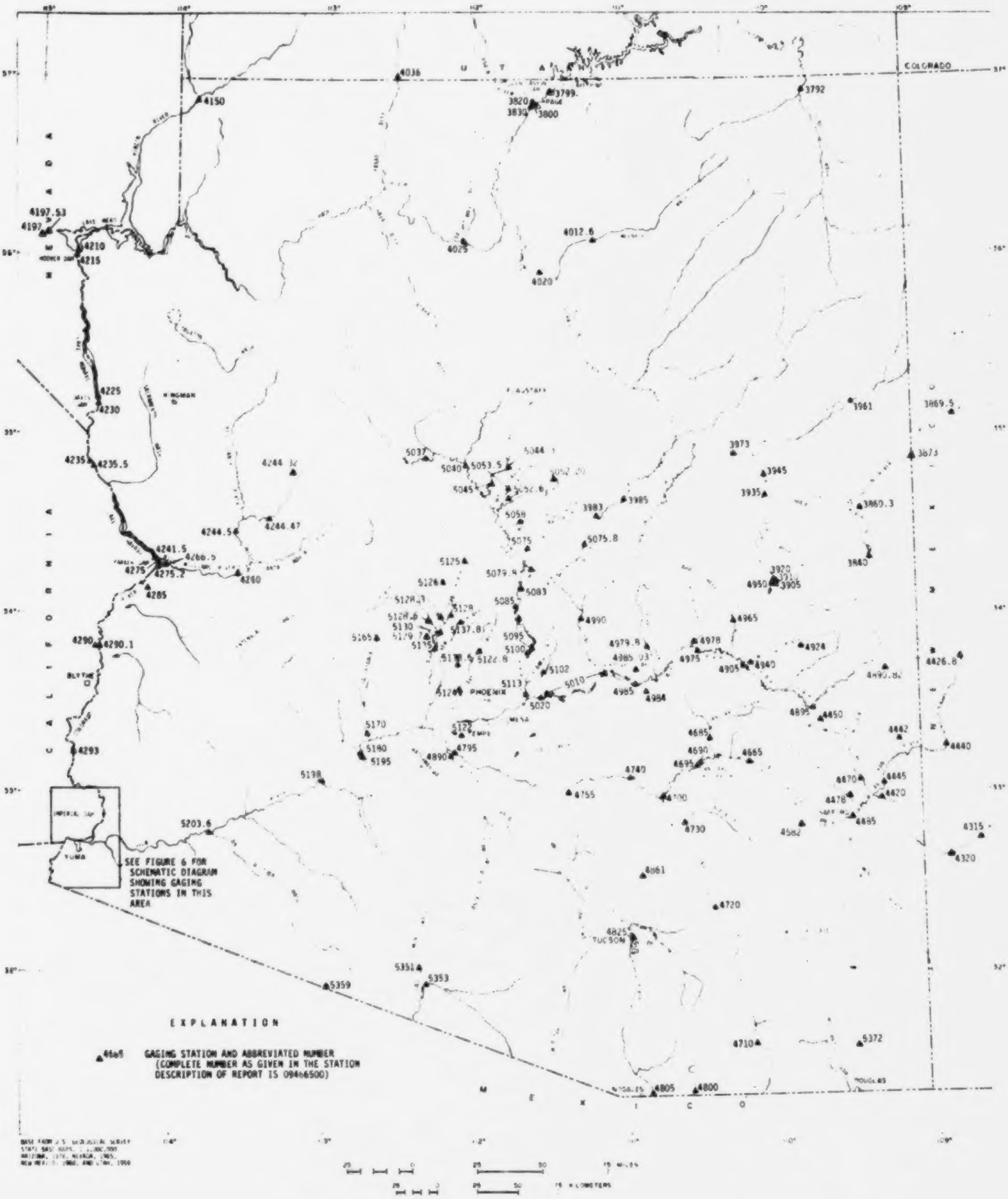
8-A1. Methods of measuring water levels in deep wells, by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages.

8-A2. Installation and service manual for U.S. Geological Survey manometers, by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.

8-B2. Calibration and maintenance of vertical-axis type current meters, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.


COLORADO
U T A H
N E V A D A
C A L I F O R N I A
N E W M E X I C O
M E X I C O
HOOVER DAM
LAKE MEAD
KINGMAN
FLAGSTAFF
BLYTHE
PHOENIX
MESA
TEMPE
TUCSON
NOGALES
DOUGLAS
SAFFORD
IMPERIAL DAM
YUMA
4036
4150
3799
3820
3830
3800
3792
4197.53
4197
4210
4215
4012.6
4025
4020
4225
4230
4235
4235.5
4244.32
4244.54
4244.47
4241.5
4266.5
4275
4275.2
4260
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4290
4290.1
4293
3961
3869.5
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3673
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5137.8
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5095
5100
5102
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5010
5020
5124
5170
5180
5195
5122
4795
4890
5198
5203.6
3840
3920
4950
3905
4990
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4979.8
4978
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4975
4905
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4984
4490.8
4426.8
4895
4450
4685
4690
4695
4665
4442
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4755
4700
4730
4582
4470
4478
4445
4420
4485
4315
4320
4861
4720
4825
5351
5353
5359
5372
4710
4805
4800
SEE FIGURE 6 FOR SCHEMATIC DIAGRAM SHOWING GAGING STATIONS IN THIS AREA
EXPLANATION
4665 GAGING STATION AND ABBREVIATED NUMBER (COMPLETE NUMBER AS GIVEN IN THE STATION DESCRIPTION OF REPORT IS 09466500)
115°
114°
113°
112°
111°
110°
109°
37°
36°
35°
34°
33°
32°
MILES
KILOMETERS

Figure 4.--Map of Arizona showing location of gaging stations.

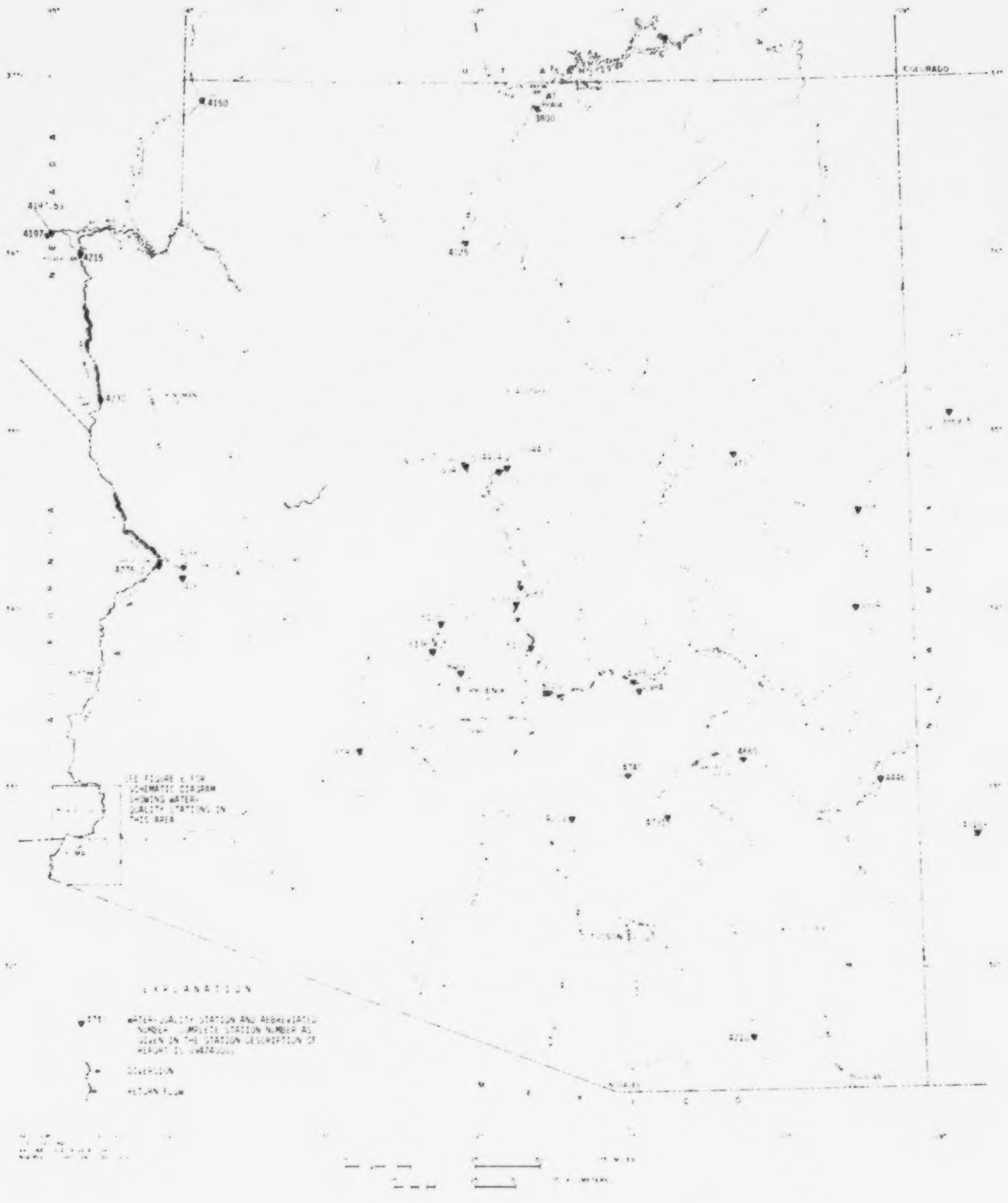
4150
3800
COLORADO
4197.53
4197
4215
4275
SEE FIGURE 6 FOR SCHEMATIC DIAGRAM SHOWING WATER-QUALITY STATIONS IN THIS AREA
EXPLANATION
WATER-QUALITY STATION AND ABBREVIATED NUMBER. COMPLETE STATION NUMBER AS GIVEN IN THE STATION DESCRIPTION OF REPORT IS 09474000
DIVERSION
RETURN FLOW

Figure 5.--Map of Arizona showing location of water-quality stations.

SAN JUAN RIVER BASIN

09379200 CHINLE CREEK NEAR MEXICAN WATER, AZ

LOCATION.--Lat 36°56'38", long 109°42'36", in sec.19, T.41 N., R.25 E. (unsurveyed), Apache County, Hydrologic Unit 14080204, in Navajo Indian Reservation, on right bank 150 ft upstream from bridge on U.S. Highway 160, 3 mi upstream from Walker Creek, 4 mi southwest of Mexican Water, 5 mi downstream from confluence of Chinle Wash and Laguna Creek, and 6 mi upstream from Arizona-Utah State line.

DRAINAGE AREA.--2,650 mi^2, revised.

PERIOD OF RECORD.--October 1964 to current year (monthly discharge only for 1979). Prior to October 1970 published as Chinle Wash near Mexican Water.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 4,720 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Some diversions upstream for irrigation, livestock tanks, and domestic use. Many Farms Reservoir, about 25 mi upstream, was built in 1939 with an original capacity of 25,000 acre-ft. The reservoir provides off-channel storage for irrigation of about 1,600 acres.

AVERAGE DISCHARGE.--24 years, 33.9 ft^3/s, 24,560 acre-ft/yr; median of yearly mean discharges, 25 ft^3/s, 18,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft^3/s Aug. 24, 1982, gage height, 13.87 ft, from rating curve extended above 3,100 ft^3/s on basis of slope-area measurement at gage height 12.50 ft; no flow at times in each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 6	0700	*2,900	*7.53	June 29	0700	2,300	6.97
Feb. 4	1000	2,080	6.74	Aug. 24	1100	1,500	6.08
Apr. 18	1100	2,670	7.32	Sept. 13	0630	1,500	6.08

No flow May 29, June 5-18, July 18-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.60	177	e3.0	1.4	140	110	1.2	80	.24	26	32	461
2	.53	1260	e2.0	1.5	48	96	.98	79	.17	9.0	18	74
3	.38	155	e3.0	.98	1330	99	.98	82	.15	3.7	18	55
4	.32	38	3.8	1.2	1470	65	1.4	58	.12	16	16	19
5	.34	109	8.4	1.4	285	39	.98	40	.00	117	5.3	11
6	.30	1670	14	2.2	206	52	.78	34	.00	19	3.7	6.5
7	.23	645	11	2.5	146	61	.69	23	.00	7.6	.91	14
8	.32	88	8.0	19	131	70	.40	12	.00	2.2	14	7.2
9	.30	24	5.3	55	72	58	.40	4.1	.00	.34	4.4	2.8
10	.30	12	3.1	89	81	31	43	.87	.00	.17	1.5	1.1
11	.30	7.2	2.5	72	133	21	56	.46	.00	.04	.98	1.4
12	.32	4.8	2.4	98	89	16	32	.36	.00	3.1	3.5	73
13	.38	3.4	3.5	53	66	9.2	31	.33	.00	24	.24	653
14	51	13	3.4	55	75	3.7	14	.28	.00	13	.74	50
15	43	19	3.7	50	63	4.4	8.8	.30	.00	7.6	5.0	20
16	35	e10	2.5	22	46	4.4	124	.32	.00	1.3	5.9	11
17	14	e8.0	2.5	45	33	2.8	1800	.50	.00	.15	25	7.6
18	8.0	e7.0	2.5	53	25	2.2	1270	1.5	.00	.00	12	6.2
19	6.9	e7.0	3.7	134	17	1.8	462	.98	21	.00	2.5	4.4
20	6.2	e6.0	3.1	40	14	3.1	281	1.6	43	.00	1.2	3.7
21	5.3	e6.0	2.9	23	15	2.0	269	.36	37	.00	.36	3.1
22	5.7	e5.0	2.8	5.0	19	1.5	272	.28	14	.00	5.3	3.4
23	6.2	e5.0	3.1	5.7	21	.98	214	.26	4.6	.00	3.2	2.5
24	7.6	e4.5	3.4	7.9	23	.91	242	.28	2.0	.00	238	2.8
25	8.8	e4.5	2.0	5.7	20	.87	244	.28	56	.00	583	3.1
26	11	e4.0	2.8	4.4	22	.87	336	.24	183	.00	696	4.8
27	8.9	e15	2.8	4.6	28	.92	176	.13	200	.00	1050	4.1
28	4.8	e10	.98	5.5	144	.69	112	.01	472	.00	496	3.7
29	27	e7.0	2.9	8.4	146	.60	96	.00	756	.00	136	5.1
30	592	e5.0	2.8	35	---	.87	98	.26	128	.00	101	2.3
31	519	---	2.4	372	---	.98	---	.32	---	16	304	---
TOTAL	1365.02	4329.4	120.28	1273.38	4908	760.79	6188.61	422.02	1917.28	266.20	3783.73	1516.8
MEAN	44.0	144	3.88	41.1	169	24.5	206	13.6	63.9	8.59	122	50.6
MAX	592	1670	14	372	1470	110	1800	82	756	117	1050	653
MIN	.23	3.4	.98	.98	14	.60	.40	.00	.00	.00	.24	1.1
AC-FT	2710	8590	239	2530	9740	1510	12280	837	3800	528	7510	3010

CAL YR 1987 TOTAL 13605.27 MEAN 37.3 MAX 1670 MIN .00 AC-FT 26990
WTR YR 1988 TOTAL 26851.51 MEAN 73.4 MAX 1800 MIN .00 AC-FT 53260

e Estimated

09379900 LAKE POWELL AT GLEN CANYON DAM, AZ

LOCATION.--Lat 36°56'12", long 111°29'00", in sec.24, T.41 N., R.8 E., Coconino County, Hydrologic Unit 14070006, at Glen Canyon Dam on Colorado River, 900 ft upstream from bridge on U.S. Highway 89, 1.4 mi downstream from Wahweap Creek, 2 mi northwest of Page, and 12 mi downstream from Utah-Arizona State line.

DRAINAGE AREA.--111,700 mi², approximately, including 3,959 mi² in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--March 1963 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Sept. 1, 1964, nonrecording gage at same site and datum.

REMARKS.--No estimated daily contents. Reservoir is formed by concrete-arch gravity dam; storage began Mar. 13, 1963; dam completed September 1963. Total capacity, 27,000,000 acre-ft consisting of the following: dead storage, 1,998,000 acre-ft below elevation 3,370 ft-sill of outlet gates; usable contents, 25,002,000 acre-ft between elevations 3,370 ft and 3,700 ft-top of conservation pool. Reservoir is used for power development, to provide storage replacement for upstream irrigation development, and to meet downstream requirements under the Colorado River Compact of 1922. Figures given herein represent usable contents; prior to Oct. 1, 1968, figures of total contents were published (prior to sealing of diversion tunnel July 7, 1965, all storage was usable).

COOPERATION.--Records furnished by U.S. Bureau of Reclamation.

EXTREMES (at 2400) FOR PERIOD OF RECORD.--Maximum contents, 26,373,000 acre-ft July 14, 1983, elevation, 3,708.34 ft; minimum since power pool level was reached (Aug. 16, 1964), 4,166,000 acre-ft Mar. 18, 1965, elevation, 3,490.76 ft.

EXTREMES (at 2400) FOR CURRENT YEAR.--Maximum contents, 23,937,000 acre-ft July 5, elevation, 3,693.31 ft; minimum, 22,159,000 acre-ft Feb. 26, elevation, 3,681.65 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

3,680	21,916,000	3,690	23,424,000
3,685	22,662,000	3,695	24,204,000

RESERVOIR STORAGE, IN THOUSANDS OF ACRE FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23099	23121	23014	22694	22357	22167	22167	22467	23151	23895	23565	23119
2	23092	23128	22999	22674	22353	22179	22174	22474	23188	23908	23538	23105
3	23083	23131	22982	22661	22344	22180	22171	22488	23223	23927	23524	23099
4	23083	23136	22964	22640	22341	22185	22185	22498	23254	23933	23502	23096
5	23072	23130	22953	22614	22338	22186	22170	22519	23286	23937	23476	23090
6	23066	23167	22948	22600	22338	22192	22171	22525	23306	23930	23480	23075
7	23052	23183	22936	22605	22335	22198	22174	22539	23335	23920	23462	23055
8	23055	23194	22927	22602	22325	22199	22171	22557	23365	23905	23448	23043
9	23049	23193	22917	22606	22310	22189	22176	22572	23400	23923	2343[illegible]	23026
10	23047	23185	22898	22606	22305	22206	22180	22588	23431	23911	23419	23020
11	23049	23180	22900	22588	22299	22204	22185	22593	23469	23900	23412	23011
12	23032	23173	22903	22591	22296	22199	22188	22602	23520	23894	23385	22994
13	23034	23164	22888	22585	22284	22196	22185	22605	23553	23880	23366	22976
14	23034	23153	22863	22578	22290	22195	22199	22615	23593	23869	23362	22961
15	23026	23153	22853	22560	22275	22182	22190	22622	23621	23858	23335	22950
16	23025	23147	22832	22551	22271	22190	22223	22641	23643	23850	23322	22944
17	23028	23136	22815	22561	22250	22180	22228	22646	23674	23847	23295	22935
18	23035	23130	22792	22531	22235	22179	22241	22685	23688	23836	23274	22938
19	23029	23127	22786	22515	22222	22180	22256	22709	23722	23819	23256	22920
20	23023	23113	22717	22498	22214	22192	22263	22756	23727	23803	23251	22907
21	23018	23104	22775	22491	22210	22180	22275	22807	23747	23785	23243	22883
22	23017	23096	22765	22470	22199	22182	22301	22854	23764	23766	23226	22874
23	23015	23078	22765	22464	22196	22163	22328	22898	23757	23763	23203	22856
24	23025	23058	22765	22441	22183	22165	22350	22933	23783	23744	23196	22849
25	23034	23041	22763	22420	22170	22170	22377	22967	23805	23725	23173	22841
26	23035	23049	22742	22411	22159	22168	22398	22986	23809	23702	23170	22818
27	23041	23040	22741	22392	22168	22190	22419	23003	23834	23676	23174	22798
28	23044	23037	22742	22380	22174	22167	22432	23031	23852	23651	23170	22779
29	23067	23034	22733	22366	22174	22165	22447	23055	23847	23617	23154	22765
30	23072	23029	22717	22366	---	22171	22452	23086	23873	23595	23154	22753
31	23084	---	22706	22366	---	22165	---	23118	---	23575	23128	---
MAX	23099	23194	23014	22694	22357	22206	22452	23118	23873	23937	23565	23119
MIN	23015	23029	22706	22366	22159	22163	22167	22467	23151	23575	23128	22753
(*)	3687.79	3687.43	3685.30	3683.04	3681.75	3681.69	3683.61	3688.01	3692.90	3690.98	3688.08	3685.61
(**)	-25000	-55000	-323000	-340000	-192000	-9000	+287000	+666000	+755000	-298000	-447000	-375000

CAL YR 1987 MAX 24755 MIN 21544 ** +142000
WTR YR 1988 MAX 23937 MIN 22159 ** -356000

* Elevation in feet, at end of month.
** Change in contents, in acre-feet.

09380000 COLORADO RIVER AT LEES FERRY, AZ
(National stream-quality accounting network)

LOCATION.--Lat 36°51'53", long 111°35'15", in NE¼SE¼ sec.13, T.40 N., R.7 E., Coconino County, Hydrologic Unit 14070006, in Navajo Indian Reservation, on left bank at head of Marble Gorge at Lees Ferry, just upstream from Paria River, 16 mi downstream from Glen Canyon Dam, 28 mi downstream from Utah-Arizona State line, and 61.5 mi upstream from Little Colorado River.

DRAINAGE AREA.--111,800 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1895 to current year. Estimates of monthly and annual discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1921-23. WSP 1313: 1914-21.

GAGE.--Water-stage recorder. Datum of gage is 3,106.16 ft above National Geodetic Vertical Datum of 1929. Prior to Jan. 19, 1923, nonrecording gages or reference points within 400 ft of present gage, at different datums.

REMARKS.--Records excellent except for Oct. 4-28 and Oct. 30 to Nov. 2, which are good. Flow regulated since Mar. 13, 1963, by Lake Powell, 16 mi upstream. Many diversions above Lake Powell for irrigation, municipal, and industrial use. No diversions or inflow between Lake Powell and the gage.

AVERAGE DISCHARGE.--51 years (water years 1912-62), 17,850 ft^3/s, 12,923,000 acre-ft/yr; 24 years (water years 1965-88), 14,620 ft^3/s, 10,592,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1895-1962: Maximum discharge, 220,000 ft^3/s June 18, 1921, gage height, 26.5 ft, from floodmarks, from rating curve extended above 120,000 ft^3/s on basis of discharge computed for station near Grand Canyon; minimum, 750 ft^3/s Dec. 27, 1924.

1963-88: Maximum discharge, 97,300 ft^3/s June 29, 1983, gage height, 18.14 ft; minimum daily, 700 ft^3/s Jan. 23, 24, 1963, result of closing coffer dam at Glen Canyon Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1868, about 300,000 ft^3/s July 7, 1884, gage height, 31.5 ft, present site and datum, from floodmark at mouth of Paria River, from rating curve extended above 120,000 ft^3/s on basis of discharge computed for flood of June 18, 1921, for station near Grand Canyon.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 27,100 ft^3/s July 28, gage height, 11.73 ft; minimum daily, 3,320 ft^3/s Nov. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12800	3320	13800	12000	13100	14100	11600	7230	8630	9110	13500	13100
2	9800	8310	16600	14000	16400	10400	8410	8730	8640	7350	15400	12800
3	11000	8790	16900	12000	15200	10100	10100	8330	8180	7150	14900	9660
4	e6550	9870	16300	16400	15500	13400	12200	8590	6910	6890	13300	9310
5	11600	9570	12900	15900	13300	11200	11900	7820	5820	10900	14300	8400
6	9660	9710	11500	13400	11100	6790	10600	7670	8000	12300	10400	11600
7	10100	10400	13500	10200	8710	10300	9950	7950	8440	15800	10700	12200
8	8290	9020	15500	10700	16300	13500	11000	7710	9810	14700	12700	11500
9	e7330	13200	12800	9460	15200	11300	8320	9570	9760	8790	13100	11600
10	8230	14800	13900	11000	13200	10800	8200	9070	9900	7880	14300	9620
11	e5740	14000	13300	11000	13000	14300	9810	12000	6420	12300	13100	6670
12	10800	13900	11500	12000	9130	12300	10100	10500	6320	11800	13800	11400
13	11000	13400	15200	13400	14200	12600	10300	11500	9840	12000	10800	11000
14	13000	12500	14900	14200	8560	12900	10600	8300	9050	12900	9500	12100
15	11500	11700	16700	13000	15500	12100	11000	10100	8370	13100	13900	12200
16	10200	13000	17200	10900	17000	11500	8250	11200	9340	8320	14800	11300
17	e6300	14000	15500	10200	16500	15300	8040	9370	9930	9280	13700	8940
18	e4990	14200	15500	17100	16200	11100	11000	9500	6350	10100	13300	8010
19	10900	11600	10900	17300	15700	5380	11800	8320	7200	11200	14300	12600
20	10600	13900	7570	15200	14100	5500	11000	8380	10200	12300	8850	11900
21	8400	12500	10400	16900	12400	13400	9810	8100	9610	12500	6930	13000
22	8380	14000	11100	17400	14500	11100	7300	9240	11300	12200	12800	12800
23	6050	17700	11700	14000	15100	11500	7940	11200	11900	9830	12600	15400
24	5810	19800	11200	14300	16400	12900	5660	10700	11400	10400	13000	10100
25	5080	14600	9250	17300	16800	9820	7600	11500	8060	14200	14300	9200
26	6300	8880	11500	14000	14600	7950	7760	12200	6860	14300	14100	16300
27	5570	12300	10000	17000	9020	7530	7460	11300	9950	14000	9930	17200
28	6760	11600	9710	14600	6680	12300	9430	6550	9780	17500	7690	13200
29	7550	9370	10500	11700	11200	12600	9020	5810	9570	16700	12300	12100
30	5760	11600	12400	9080	---	11500	7520	5610	10000	12900	13000	11700
31	5310	---	11400	8860	---	12900	---	6160	---	10300	13400	---
TOTAL	261360	361740	401130	414500	394600	348370	283680	280210	265540	359000	388700	346910
MEAN	8431	12060	12940	13370	13610	11240	9456	9039	8851	11580	12540	11560
MAX	13000	19800	17200	17400	17000	15300	12200	12200	11900	17500	15400	17200
MIN	4990	3320	7570	8860	6680	5380	5660	5610	5820	6890	6930	6670
AC-FT	518400	717500	795600	822200	782700	691000	562700	555800	526700	712100	771000	688100

CAL YR 1987 TOTAL 5805280 MEAN 15900 MAX 28900 MIN 3320 AC-FT 11510000
WTR YR 1988 TOTAL 4105740 MEAN 11220 MAX 19800 MIN 3320 AC-FT 8144000

e Estimated

09380000 COLORADO RIVER AT LEES FERRY, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January to July 1926, October 1926 to June 1927, October 1928 to December 1933, November 1942 to October 1945, October 1947 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1981, February 1982 to December 1987 (discontinued).
WATER TEMPERATURE: July 1949 to September 1981, February 1982 to December 1987 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: October 1928 to December 1933, November 1942 to September 1944, October 1947 to September 1965.

INSTRUMENTATION.--Specific conductance and water temperature recorder March 1977 to September 1981, February 1982 to December 1987.

REMARKS.--Unpublished daily specific conductance measurements for period November 1942 to October 1945, October 1947 to September 1964 available from district office in Tucson, Ariz.

Because of the permanent change in stream characteristics owing to the regulation of flow by Glen Canyon Dam since Mar. 13, 1963, and the subsequent initial filling of Lake Powell, extreme values for the period of daily record now include only those obtained after July 31, 1965, at which time a normal flow release pattern was begun.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (August 1965 to September 1981, February 1982 to December 1987): Maximum, 1,260 microsiemens Apr. 20, 21, 1967; minimum, 460 microsiemens Aug. 10, 1965.
WATER TEMPERATURES (August 1965 to September 1981, February 1982 to December 1987): Maximum 21.0°C on several days during August, September, and October, 1965, 1967, 1968; minimum, 2.0°C on Jan. 29, 30, 1970.

EXTREMES FOR PERIOD OCTOBER-DECEMBER.--
SPECIFIC CONDUCTANCE: Maximum recorded, 714 microsiemens Dec. 24; minimum recorded, 656 microsiemens Dec. 27, 28.
WATER TEMPERATURE: Maximum recorded, 9.8°C Oct. 1, Dec. 18, 19; minimum recorded, 7.8°C Dec. 24.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT 1987												
21...	1355	7100	680	8.20	23.0	9.5	0.50	685	8.6	84	61	K1
NOV												
16...	0800	8300	700	8.00	3.5	8.5	0.40	685	7.8	74	82	K1
DEC												
30...	1400	14200	660	8.20	6.5	9.0	0.90	686	9.0	87	<10	K1
JAN 1988												
21...	1445	20500	660	8.20	4.5	8.5	0.50	690	9.4	99	86	K1
FEB												
24...	1430	21300	780	8.10	13.5	8.0	0.40	687	9.5	89	32	<1
MAR												
07...	1220	11400	860	8.10	10.5	8.5	1.2	688	8.9	85	<10	<1
APR												
06...	1010	7500	895	8.05	16.5	8.5	0.70	691	8.5	80	<10	<1
MAY												
10...	1300	7400	920	8.15	26.5	9.0	0.40	690	9.2	88	17	<1
JUN												
08...	1200	8500	856	8.10	28.0	9.5	0.40	684	8.3	81	26	<1
JUL												
12...	1355	15200	870	8.00	34.0	9.5	1.1	683	9.6	94	23	K2
AUG												
10...	1130	11400	645	8.00	31.0	9.0	0.50	683	7.9	77	37	K2
SEP												
01...	1045	8500	836	7.90	27.0	9.0	0.60	680	7.5	73	16	K1

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09380000 COLORADO RIVER AT LEES FERRY, AZ--Continued

WATER QUALITY DATA

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT 1987 21...	K4	240	110	61	21	51	1	2.9	160	130	0	131
NOV 16...	K1	240	110	60	22	55	2	2.9	160	131	0	131
DEC 30...	K8	240	120	60	22	54	2	3.0	148	121	0	121
JAN 1988 21...	K9	240	120	60	22	54	2	3.0	155	125	0	127
FEB 24...	K1	260	140	66	24	63	2	3.0	154	125	0	126
MAR 07...	K3	290	160	73	27	72	2	3.6	164	133	0	134
APR 06...	K2	300	160	73	28	75	2	3.3	173	140	0	142
MAY 10...	K1	300	160	72	28	76	2	2.5	168	139	0	138
JUN 08...	K1	290	150	71	27	74	2	3.4	178	142	0	146
JUL 12...	K4	290	150	71	28	74	2	3.2	172	141	0	141
AUG 10...	K4	280	150	70	26	68	2	3.0	160	130	0	131
SEP 01...	K3	270	150	67	26	67	2	2.9	155	125	0	127

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 1987 21...	160	29	0.30	9.1	439	415	0.60	3	<0.010	0.400	0.350	0.010
NOV 16...	180	30	0.30	--	460	429	0.63	5	--	0.400	--	0.020
DEC 30...	170	31	0.30	8.9	452	423	0.61	<1	<0.010	0.200	0.230	0.020
JAN 1988 21...	180	30	0.30	--	435	424	0.59	1	--	0.200	--	<0.010
FEB 24...	200	42	0.30	9.1	508	485	0.69	3	<0.010	0.400	0.370	0.020
MAR 07...	230	46	0.30	--	548	532	0.75	4	--	0.400	--	<0.010
APR 06...	240	52	0.30	8.9	588	567	0.80	<1	<0.010	0.400	0.360	0.020
MAY 10...	240	55	0.40	--	584	557	0.79	<1	--	0.300	--	0.030
JUN 08...	230	51	0.30	8.9	562	553	0.76	<1	<0.010	0.400	0.370	0.030
JUL 12...	240	49	0.30	--	557	550	0.76	6	--	0.400	--	0.020
AUG 10...	230	45	0.20	8.8	552	532	0.75	6	<0.010	0.400	0.510	0.010
SEP 01...	210	43	0.20	--	531	491	0.72	4	--	0.400	--	0.020

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P) (00673)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT 1987 21...	0.020	0.29	0.30	0.70	3.1	0.040	<0.010	<0.010	--	0.04	--	<10
NOV 16...	--	0.38	0.40	0.80	3.5	0.010	--	--	--	0.01	--	--
DEC 30...	<0.010	--	<0.20	--	--	0.010	0.010	<0.010	--	0.01	0.01	--
JAN 1988 21...	--	--	0.20	0.40	1.8	0.010	--	--	--	0.01	--	--
FEB 24...	0.040	0.28	0.30	0.70	3.1	0.020	0.030	<0.010	--	0.02	0.03	<10
MAR 07...	--	--	0.20	0.60	2.7	0.020	--	--	--	0.02	--	--
APR 06...	0.020	0.28	0.30	0.70	3.1	<0.010	<0.010	<0.010	--	--	--	<10
MAY 10...	--	0.27	0.30	0.60	2.7	0.010	--	--	--	0.01	--	--
JUN 08...	0.010	0.67	0.70	1.1	4.9	0.010	0.010	<0.010	--	0.01	0.01	--
JUL 12...	--	0.36	0.40	0.80	3.5	<0.010	--	--	--	--	--	--
AUG 10...	<0.010	0.49	0.50	0.90	4.0	0.010	0.010	0.010	0.03	0.01	0.0	<10
SEP 01...	--	0.28	0.30	0.70	3.1	<0.010	--	--	--	--	--	--

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09380000 COLORADO RIVER AT LEES FERRY, AZ--Continued

WATER QUALITY DATA

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1987											
21...	1	1	78	<0.5	70	2	<1	46	2	<3	28
NOV											
16...	2	2	84	--	70	1	<1	13	<1	--	17
DEC											
30...	1	1	<100	--	60	1	2	3	<1	--	19
JAN 1988											
21...	2	2	100	--	70	--	<1	2	<1	--	11
FEB											
24...	1	1	80	<0.5	80	5	1	10	1	<3	14
MAR											
07...	1	1	82	--	90	1	<1	1	<1	--	24
APR											
06...	1	<1	82	<0.5	90	2	<1	<1	<1	<3	15
MAY											
10...	2	2	82	--	90	2	<1	3	<1	--	18
JUN											
08...	2	2	100	--	100	70	34	1	3	--	32
JUL											
12...	2	2	87	--	70	3	3	3	<1	--	13
AUG											
10...	1	2	84	<0.5	90	2	3	1	<1	<3	6
SEP											
01...	2	2	84	--	80	<1	6	1	<1	--	14

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)
OCT 1987											
21...	4	300	4	5	<5	27	<10	<1	<0.10	<0.1	<10
NOV											
16...	8	260	8	24	<5	--	10	3	<0.10	--	--
DEC											
30...	6	30	<10	5	<5	--	<10	<10	<0.10	--	--
JAN 1988											
21...	3	50	<10	<5	<5	--	<10	<10	<0.10	--	--
FEB											
24...	5	50	5	30	<5	34	<10	<1	<0.10	<0.1	<10
MAR											
07...	6	20	<3	<5	<5	--	30	1	<0.10	--	--
APR											
06...	6	20	3	<5	<5	42	10	<1	--	--	<10
MAY											
10...	7	10	6	5	<5	--	<10	<1	<0.10	--	--
JUN											
08...	27	50	<10	7	<5	--	<10	<10	<0.10	--	--
JUL											
12...	7	60	7	5	<5	--	20	2	<0.10	--	--
AUG											
10...	4	60	7	<5	<5	31	<10	<1	<0.10	<0.1	<10
SEP											
01...	<1	60	42	<5	<5	--	<10	2	<0.10	--	--

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1987											
21...	3	2	1	<1.0	660	<6	10	11	95	4	77
NOV											
16...	--	2	2	<1.0	--	--	20	8	--	4	96
DEC											
30...	--	2	1	<1.0	--	--	<10	<10	74	4	153
JAN 1988											
21...	--	2	2	<1.0	--	--	<10	<10	--	4	232
FEB											
24...	1	3	3	<1.0	730	<6	<10	<3	65	5	288
MAR											
07...	--	3	2	<1.0	--	--	30	5	--	3	80
APR											
06...	<1	2	3	1.0	840	<6	10	3	58	4	81
MAY											
10...	--	3	3	<1.0	--	--	10	5	--	--	--
JUN											
08...	--	3	3	1.0	--	--	<10	<10	89	2	46
JUL											
12...	--	3	3	<1.0	--	--	<10	7	--	3	131
AUG											
10...	1	3	3	1.0	780	<6	10	10	68	1	31
SEP											
01...	--	3	3	1.0	--	--	10	53	--	2	41

< Actual value is known to be less than value shown.

09380000 COLORADO RIVER AT LEES FERRY, AZ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	686	678	682	---	---	---	682	671	678	---	---	---
2	---	---	---	678	667	672	690	675	684	---	---	---
3	---	---	---	678	675	677	694	678	688	---	---	---
4	---	---	---	682	671	678	694	678	688	---	---	---
5	---	---	---	678	663	673	690	675	684	---	---	---
6	---	---	---	675	663	670	682	671	678	---	---	---
7	---	---	---	686	671	676	682	671	678	---	---	---
8	---	---	---	698	675	688	694	682	689	---	---	---
9	---	---	---	686	671	679	698	682	692	---	---	---
10	---	---	---	678	667	675	690	682	687	---	---	---
11	---	---	---	678	667	673	690	675	684	---	---	---
12	---	---	---	682	667	675	686	678	684	---	---	---
13	---	---	---	678	671	676	686	678	682	---	---	---
14	---	---	---	682	667	676	682	671	677	---	---	---
15	---	---	---	688	671	680	686	675	680	---	---	---
16	---	---	---	694	667	683	690	678	684	---	---	---
17	---	---	---	678	671	676	682	675	678	---	---	---
18	---	---	---	686	675	680	682	667	677	---	---	---
19	---	---	---	690	678	684	678	671	675	---	---	---
20	---	---	---	686	675	679	675	671	672	---	---	---
21	---	---	---	690	678	684	686	675	681	---	---	---
22	678	671	675	682	671	678	686	682	685	---	---	---
23	678	667	673	682	671	677	698	678	685	---	---	---
24	---	---	---	690	678	685	714	690	704	---	---	---
25	---	---	---	690	682	688	690	671	681	---	---	---
26	---	---	---	686	671	678	671	664	666	---	---	---
27	---	---	---	682	671	676	664	656	660	---	---	---
28	---	---	---	682	675	678	664	656	662	---	---	---
29	678	667	674	686	675	680	---	---	---	---	---	---
30	---	---	---	682	675	678	---	---	---	---	---	---
31	---	---	670	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

WATER TEMPERATURE, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.8	8.8	9.4	---	---	---	9.2	8.8	8.9	---	---	---
2	---	---	---	9.4	9.2	9.3	9.0	8.6	8.9	---	---	---
3	---	---	---	9.4	9.0	9.2	9.0	8.6	8.8	---	---	---
4	---	---	---	9.2	8.8	9.0	9.0	8.6	8.8	---	---	---
5	---	---	---	9.4	9.0	9.1	9.2	8.8	8.9	---	---	---
6	---	---	---	9.4	9.0	9.3	9.0	8.8	8.9	---	---	---
7	---	---	---	9.4	8.8	9.2	9.2	8.8	9.0	---	---	---
8	---	---	---	9.0	8.6	8.8	8.8	8.4	8.6	---	---	---
9	---	---	---	9.0	8.4	8.8	8.8	8.2	8.5	---	---	---
10	---	---	---	9.2	8.8	9.0	8.8	8.4	8.7	---	---	---
11	---	---	---	9.2	8.8	9.1	9.0	8.6	8.8	---	---	---
12	---	---	---	9.0	8.8	8.9	8.8	8.4	8.5	---	---	---
13	---	---	---	9.2	8.8	8.9	9.2	8.4	8.8	---	---	---
14	---	---	---	9.2	8.8	9.0	9.6	9.2	9.4	---	---	---
15	---	---	---	8.8	8.2	8.5	9.6	9.0	9.3	---	---	---
16	---	---	---	9.0	8.2	8.7	9.4	9.0	9.2	---	---	---
17	---	---	---	9.2	8.8	9.0	9.4	9.2	9.4	---	---	---
18	---	---	---	9.2	8.8	9.0	9.8	9.4	9.5	---	---	---
19	---	---	---	9.0	8.6	8.8	9.8	9.4	9.6	---	---	---
20	---	---	---	9.0	8.6	8.8	9.6	9.4	9.4	---	---	---
21	---	---	---	9.0	8.4	8.8	9.4	8.8	9.1	---	---	---
22	9.4	8.8	9.2	9.2	8.6	9.0	9.2	9.0	9.0	---	---	---
23	---	---	---	9.2	8.8	9.0	9.2	8.4	9.0	---	---	---
24	---	---	---	9.2	8.8	8.9	8.4	7.8	8.1	---	---	---
25	---	---	---	9.0	8.6	8.8	8.8	8.4	8.7	---	---	---
26	---	---	---	9.0	8.6	8.8	9.6	9.0	9.3	---	---	---
27	---	---	---	9.0	8.8	8.9	9.4	9.2	9.3	---	---	---
28	---	---	---	9.0	8.6	8.8	9.4	9.0	9.2	---	---	---
29	---	---	---	9.0	8.8	8.8	---	---	---	---	---	---
30	---	---	---	9.0	8.6	8.9	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

09382000 PARIA RIVER AT LEES FERRY, AZ

LOCATION.--Lat 36°52'20", long 111°35'38", in NW¼NE¼ sec.13, T.40 N., R.7 E., Coconino County, Hydrologic Unit 14070007, on left bank 0.6 mi northwest of Lees Ferry, and 1.1 mi upstream from mouth.

DRAINAGE AREA.--1,410 mi^2.

PERIOD OF RECORD.--October 1923 to current year.

REVISED RECORDS.--WSP 1925: 1958(M), drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,123.68 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 5, 1925 nonrecording gage at site 2,000 ft upstream at different datum. Oct. 13, 1925, to Sept. 11, 1929, nonrecording gage at present site and datum.

REMARKS.--Records good except those above 50 ft^3/s, which are fair, and estimated days, which are poor. Diversions above station for irrigation of about 3,300 acres, mostly in southern Utah.

AVERAGE DISCHARGE.--65 years, 29.5 ft^3/s, 21,370 acre-ft/yr; median of yearly mean discharges, 26 ft^3/s, 18,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,100 ft^3/s Oct. 5, 1925, gage height, 16.3 ft, from floodmark, from rating curve extended above 2,000 ft^3/s on basis of float-area measurement of peak flow; maximum gage height, 16.65 ft Sept. 9, 1980; minimum daily discharge, 1 ft^3/s in most years prior to 1931.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 6	0915	*910	*8.31

Minimum daily discharge, 3.0 ft^3/s Dec. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	164	19	7.3	29	33	6.3	e17	4.7	13	14	92
2	e15	232	19	11	26	33	6.0	e16	5.0	7.3	49	31
3	e15	215	20	14	33	27	5.9	e16	5.9	6.3	76	e15
4	e14	132	19	11	22	21	6.2	e15	4.9	5.7	196	e12
5	e14	44	22	14	15	18	6.0	e15	4.0	5.6	46	e10
6	e13	346	22	17	16	15	5.9	e15	3.7	e5.0	23	e8.0
7	e13	96	21	22	17	15	5.7	e15	3.6	e4.0	36	e6.0
8	e12	51	19	18	18	14	5.5	17	3.5	e4.0	25	5.0
9	e11	29	17	19	18	13	5.2	19	3.7	e5.0	16	5.0
10	e10	23	16	15	38	13	5.3	21	3.6	e4.5	12	4.9
11	e9.0	21	21	15	48	14	5.3	17	3.7	e6.0	11	5.2
12	e8.0	20	19	18	27	14	5.4	12	3.8	5.9	13	9.2
13	e7.0	20	e15	11	25	14	5.4	8.6	4.1	4.3	14	16
14	32	23	e10	8.1	23	14	5.9	7.0	3.9	3.9	13	31
15	29	29	e8.0	12	22	15	15	6.1	4.0	3.6	10	17
16	19	29	6.4	14	20	15	83	5.8	4.0	3.5	9.2	12
17	20	20	8.3	24	18	17	133	6.6	4.1	3.6	8.7	12
18	e16	21	14	23	14	14	84	6.4	5.1	3.6	8.5	10
19	e14	19	23	13	17	14	41	5.7	4.6	3.5	8.1	9.2
20	e14	18	22	6.1	16	14	30	5.3	11	3.7	7.9	8.5
21	14	19	16	e5.5	16	14	24	5.4	5.3	3.8	7.5	8.0
22	15	20	14	e3.5	16	14	74	5.3	4.4	3.9	7.4	48
23	15	19	21	e4.5	15	14	54	5.2	4.5	3.7	11	43
24	e17	18	e20	14	15	13	104	5.2	4.6	4.2	14	19
25	e37	18	e6.0	17	16	13	63	5.3	4.8	4.1	12	e14
26	33	18	e4.0	15	16	14	41	5.1	5.4	4.4	36	e11
27	21	17	e3.0	17	18	13	32	4.9	5.9	4.5	157	e6.0
28	19	17	e5.0	21	37	10	27	4.7	5.2	4.2	173	e5.0
29	20	19	e5.0	30	50	6.5	25	5.2	6.2	4.3	45	e5.0
30	244	20	8.0	31	---	5.8	19	5.5	26	12	74	e5.0
31	79	---	12	39	---	5.7	---	4.9	---	5.5	44	---
TOTAL	815.0	1737	454.7	490.0	661	470.0	929.0	303.2	163.2	156.6	1177.3	483.0
MEAN	26.3	57.9	14.7	15.8	22.8	15.2	31.0	9.78	5.44	5.05	38.0	16.1
MAX	244	346	23	39	50	33	133	21	26	13	196	92
MIN	7.0	17	3.0	3.5	14	5.7	5.2	4.7	3.5	3.5	7.4	4.9
AC-FT	1620	3450	902	972	1310	932	1840	601	324	311	2340	958

CAL YR 1987 TOTAL 8758.3 MEAN 24.0 MAX 454 MIN 3.0 AC-FT 17370
WTR YR 1988 TOTAL 7840.0 MEAN 21.4 MAX 346 MIN 3.0 AC-FT 15550

e Estimated

09383000 COLORADO RIVER AT COMPACT POINT, NEAR LEES FERRY, AZ

LOCATION.--Lat 36°51'05", long 111°36'21", in NE¼SE¼ sec.23, T.40 N., R.7 E., Coconino County, Hydrologic Units 14070006, 15010001, (see REMARKS), 1.0 mi downstream from Paria River, 1.4 mi downstream from gage on Colorado River at Lees Ferry, and 29 mi downstream from Utah-Arizona State line.

DRAINAGE AREA.--112,000 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--October 1913 to current year (monthly discharge only). Prior to October 1950, published in WSP 1313.

DETERMINATION OF DISCHARGE.--There is no gage. Monthly and yearly discharge computed as the sum of flow at stations on Colorado River and Paria River at Lees Ferry.

REMARKS.--This location on the Colorado River is the dividing point between the Upper Basin and Lower Basin, as defined in the Colorado River Compact of 1922. Flow substantially regulated by Lake Powell beginning Mar. 13, 1963. (See elsewhere in this report.)

AVERAGE DISCHARGE.--49 years (water years 1914-62), 17,760 ft^3/s, 12,870,000 acre-ft/yr; 24 years (water years 1965-88), 14,650 ft^3/s, 10,610,000 acre-ft/yr.

MONTHLY DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Month	Mean	Runoff in acre-feet
October	8,451	519,600
November	12,100	720,200
December	12,940	795,700
CAL YR 1987	15,920	11,520,000
January	13,370	822,300
February	13,610	782,900
March	11,240	691,100
April	9,483	564,300
May	9,047	556,300
June	8,854	526,800
July	11,580	712,200
August	12,560	772,500
September	11,570	688,400
WTR YR 1988	11,230	8,152,000

NOTE.--Record shown is sum of flow at stations on Colorado River and Paria River at Lees Ferry.

09383400 LITTLE COLORADO RIVER AT GREER, AZ

LOCATION.--Lat 34°01'00", long 109°27'24", in NE¼SE¼ sec.11, T.7 N., R.27 E., Apache County, Hydrologic Unit 15020001, in Apache National Forest, at former gaging station at culverts on State Highway 373, at Greer, 0.1 mi downstream from Filler Ditch.

DRAINAGE AREA.--29.1 mi^2 (revised).

PERIOD OF RECORD.--January 1976 to September 1979, October 1980 to September 1984, October 1986 to September 1988 (discontinued).

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1987											
15...	1450	5.8	75	7.80	15.0	10.0	0.80	567	7.8	93	<10
NOV											
12...	1515	14	60	7.84	10.0	6.0	2.0	569	8.2	88	45
DEC											
16...	1430	7.7	62	8.00	1.0	0.0	1.5	564	10.1	94	25
JAN 1988											
15...	1040	7.8	77	7.63	10.0	0.5	4.3	567	<10.7	--	<10
FEB											
29...	1545	8.5	105	7.62	13.5	6.0	14	567	8.7	94	12
MAR											
15...	1410	11	80	7.83	9.0	7.5	5.8	561	8.6	98	83
APR											
07...	1422	28	55	7.80	15.5	9.0	4.4	568	--	--	11
MAY											
04...	1425	35	52	7.80	18.5	14.0	5.2	567	7.0	92	<10
JUN											
02...	1330	24	45	7.80	20.0	15.5	5.0	571	7.4	100	25
JUL											
13...	1345	12	63	8.11	25.5	19.0	2.1	571	6.9	100	18
AUG											
03...	1530	18	57	8.05	22.0	18.0	4.8	570	7.2	102	16
30...	1250	27	72	7.79	15.0	15.0	3.6	563	7.5	101	18

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
OCT 1987										
15...	K15	84	30	0	7.7	2.7	4.2	0.3	2.2	46
NOV										
12...	K14	32	25	0	6.4	2.2	3.7	0.3	1.7	38
DEC										
16...	K2	21	27	0	6.8	2.4	4.0	0.3	1.9	45
JAN 1988										
15...	K1	E22	32	0	8.3	2.8	4.7	0.4	1.8	52
FEB										
29...	K9	E120	42	0	11	3.6	5.3	0.4	2.5	60
MAR										
15...	<1	K10	34	0	8.4	3.1	4.2	0.3	1.8	51
APR										
07...	<1	K9	25	0	6.3	2.3	3.0	0.3	1.2	34
MAY										
04...	K1	21	23	0	5.8	2.0	3.0	0.3	1.3	32
JUN										
02...	K1	K19	17	0	4.5	1.5	2.8	0.3	1.4	23
JUL										
13...	56	360	27	0	6.8	2.4	3.8	0.3	1.7	40
AUG										
03...	80	330	27	0	6.7	2.5	3.6	0.3	1.5	35
30...	97	420	34	0	8.4	3.2	3.5	0.3	1.4	49

E Estimated
K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09383400 LITTLE COLORADO RIVER AT GREER, AZ--Continued

WATER QUALITY DATA

DATE	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
OCT 1987										
15...	37	0	37	4.4	1.6	0.10	63	45	0.09	3
NOV										
12...	31	0	31	5.9	1.3	0.10	64	40	0.09	4
DEC										
16...	37	0	37	4.9	0.90	0.20	65	43	0.09	1
JAN 1988										
15...	44	0	43	4.3	1.0	0.10	75	50	0.10	2
FEB										
29...	50	0	49	8.1	2.4	0.20	85	63	0.12	13
MAR										
15...	42	0	42	5.9	3.0	0.10	76	52	0.10	10
APR										
07...	29	0	28	7.1	1.0	0.10	66	39	0.09	5
MAY										
04...	26	0	26	7.5	0.70	0.10	49	36	0.07	15
JUN										
02...	20	0	19	4.8	0.70	0.30	47	28	0.06	8
JUL										
13...	35	0	33	4.5	0.60	0.10	65	41	0.09	5
AUG										
03...	31	0	29	4.5	0.70	0.10	62	38	0.08	17
30...	41	0	40	5.3	0.80	0.10	71	48	0.10	12

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)
OCT 1987										
15...	<0.100	0.010	0.19	0.20	0.040	0.04	<1	<1	7	<10
NOV										
12...	<0.100	0.030	--	<0.20	0.030	0.03	1	1	6	<10
DEC										
16...	<0.100	<0.010	--	<0.20	0.030	0.03	<1	<1	6	<10
JAN 1988										
15...	<0.100	0.020	0.28	0.30	0.050	0.05	<1	<1	6	<10
FEB										
29...	<0.100	0.040	0.76	0.80	0.120	0.12	<1	<1	9	<10
MAR										
15...	<0.100	0.010	0.29	0.30	0.040	0.04	1	<1	7	<10
APR										
07...	<0.100	0.020	0.28	0.30	0.040	0.04	<1	1	8	<10
MAY										
04...	<0.100	0.030	--	<0.20	0.040	0.04	<1	<1	7	<10
JUN										
02...	<0.100	0.020	--	<0.20	0.030	0.03	<1	<1	6	<10
JUL										
13...	<0.100	<0.010	--	0.40	0.050	0.05	<1	1	7	<10
AUG										
03...	<0.100	0.020	0.48	0.50	0.030	0.03	<1	<1	8	<10
30...	<0.100	0.020	0.48	0.50	0.060	0.06	<1	<1	8	<10

< Actual value is known to be less than value shown.

09383400 LITTLE COLORADO RIVER AT GREER, AZ--Continued

WATER QUALITY DATA

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT 1987										
15...	1	<1	5	3	2	1	220	180	<5	<5
NOV										
12...	<1	<1	2	<1	3	1	220	120	<5	<5
DEC										
16...	1	<1	3	<1	2	1	180	120	<5	<5
JAN 1988										
15...	<1	<1	2	<1	8	4	600	130	<5	<5
FEB										
29...	<1	<1	3	<1	4	2	1500	53	<5	<5
MAR										
15...	<1	<1	2	<1	3	2	520	190	<5	<5
APR										
07...	<1	<1	<1	<1	3	<1	420	220	<5	<5
MAY										
04...	1	<1	4	1	6	6	610	24	<5	<5
JUN										
02...	<1	<1	3	1	5	2	200	95	<5	<5
JUL										
13...	<1	<1	1	<1	1	2	320	230	<5	<5
AUG										
03...	1	3	1	<1	5	<1	570	180	<5	<5
30...	1	1	1	<1	3	<1	560	250	<5	<5

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1987										
15...	10	13	--	<1	2	<1.0	<10	12	8	0.12
NOV										
12...	10	12	0.10	<1	<1	<1.0	<10	5	7	0.26
DEC										
16...	20	22	<0.10	<1	<1	<1.0	<10	5	9	0.18
JAN 1988										
15...	60	56	<0.10	<1	<1	<1.0	<10	8	14	0.29
FEB										
29...	90	70	<0.10	<1	<1	1.0	<10	4	30	0.68
MAR										
15...	30	16	<0.10	<1	<1	<1.0	<10	<3	7	0.21
APR										
07...	20	7	--	<1	<1	<1.0	<10	<3	12	0.90
MAY										
04...	30	8	<0.10	<1	<1	<1.0	10	4	10	0.93
JUN										
02...	20	8	<0.10	<1	<1	3.0	<10	3	8	0.52
JUL										
13...	30	12	<0.10	<1	<1	2.0	<10	<3	5	0.17
AUG										
03...	20	13	<0.10	<1	<1	7.0	<10	5	14	0.69
30...	30	20	<0.10	<1	<1	<1.0	10	8	6	0.45

< Actual value is known to be less than value shown.

09384000 LITTLE COLORADO RIVER ABOVE LYMAN LAKE, NEAR ST. JOHNS, AZ

LOCATION.--Lat 34°18'52", long 109°21'42", in SW¼SE¼ sec.27, T.11 N., R.28 E., Apache County, Hydrologic Unit 15020001, on left bank 0.75 mi downstream from Coyote Creek, 6 mi upstream from Lyman Dam, and 15 mi south of St. Johns.

DRAINAGE AREA.--706 mi^2, revised, of which 2.5 mi^2 is noncontributing.

PERIOD OF RECORD.--April 1940 to current year. Prior to October 1975 published as "above Lyman Reservoir."

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 6,010 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 7, 1976, water-stage recorder at site 0.4 mi downstream at datum approximately 20 ft lower, reactivated Mar. 21, 1980. See WSP 1313 for history of changes prior to 1950.

REMARKS.--Records fair. Flow regulated by many small reservoirs - combined capacity, about 15,500 acre-ft. Diversions for irrigation of about 6,700 acres above station.

AVERAGE DISCHARGE.--48 years, 24.0 ft^3/s, 17,390 acre-ft/yr; median of yearly mean discharges, 17 ft^3/s, 12,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,000 ft^3/s July 25, 1940, gage height, 17.1 ft, datum then in use, from floodmarks, by slope-area measurement of peak flow and reservoir in flow studies; maximum gage height, 18.6 ft, Sept. 12, 1975, at previous site (from graph recorded to 18.4 ft); no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 1	0015	*414	*4.82

Minimum daily discharge, 2.5 ft^3/s Oct. 4-6, 10-12, 16-19, June 14-17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	3.5	8.8	13	20	34	101	104	7.1	9.9	18	305
2	3.4	4.4	9.0	13	20	33	83	65	6.9	8.2	22	271
3	2.9	8.2	10	12	22	33	85	51	6.5	6.8	19	242
4	e2.5	8.7	11	14	29	32	84	43	5.7	15	16	198
5	e2.5	7.2	11	14	32	30	72	32	9.1	18	15	153
6	e2.5	11	10	15	28	29	65	25	7.2	39	20	130
7	3.1	25	8.0	14	23	31	58	24	6.3	44	17	113
8	3.1	20	8.4	13	22	36	58	20	5.8	31	17	86
9	e2.6	15	9.7	12	20	34	56	29	4.6	22	17	78
10	e2.5	13	11	13	20	33	49	38	3.7	18	13	70
11	e2.5	11	10	13	19	31	47	26	3.5	20	12	62
12	e2.5	11	9.9	11	19	30	28	18	3.3	15	11	63
13	e2.6	9.8	9.5	13	21	28	29	16	3.4	11	9.8	64
14	e2.8	9.7	e7.7	14	22	23	33	18	e2.5	6.2	9.6	64
15	e3.0	10	e5.5	25	20	22	36	14	e2.5	6.1	9.4	59
16	e2.5	11	8.3	43	23	22	47	16	e2.5	7.4	10	58
17	e2.5	11	13	41	30	25	94	14	e2.5	5.3	18	54
18	e2.5	11	14	44	30	23	83	11	e2.6	5.0	20	51
19	e2.5	11	15	43	32	23	84	10	e3.4	5.1	16	48
20	e2.8	11	13	36	30	20	124	9.8	4.0	4.7	18	48
21	3.2	11	12	29	32	19	124	8.6	3.5	4.6	20	47
22	3.2	12	12	32	31	28	115	7.4	4.0	6.2	29	46
23	4.4	12	12	29	29	51	112	8.6	3.9	6.1	54	30
24	3.9	11	11	37	25	75	143	8.8	5.1	5.4	65	20
25	e2.8	11	9.5	37	21	85	149	8.9	9.0	e2.9	84	18
26	2.9	12	e6.0	38	22	92	133	9.5	11	e2.8	81	17
27	e2.8	10	e5.0	43	31	117	113	8.1	13	e2.6	56	15
28	e2.6	9.2	e5.0	41	37	145	90	6.9	22	3.3	53	11
29	e2.6	9.3	9.0	42	35	132	101	6.1	14	6.6	75	11
30	2.8	10	20	31	---	122	130	5.1	13	16	101	10
31	e2.8	---	14	22	---	113	---	8.3	---	16	132	---
TOTAL	89.2	330.1	318.3	797	745	1551	2532	670.1	191.6	370.2	1057.8	2442
MEAN	2.88	11.0	10.3	25.7	25.7	50.0	84.4	21.6	6.39	11.9	34.1	81.4
MAX	4.4	25	20	44	37	145	149	104	22	44	132	305
MIN	2.5	3.5	5.0	11	19	19	28	5.1	2.5	2.6	9.4	10
AC-FT	177	655	631	1580	1480	3080	5020	1330	380	734	2100	4840

CAL YR	1987	TOTAL	17982.8	MEAN	49.3	MAX	863	MIN	2.1	AC-FT 35670
WTR YR	1988	TOTAL	11094.3	MEAN	30.3	MAX	305	MIN	2.5	AC-FT 22010

e Estimated

09386030 LITTLE COLORADO RIVER ABOVE ZION RESERVOIR, NEAR ST. JOHNS, AZ

LOCATION.--Lat 34°35'01", long 109°24'23", in SE¼SE¼ sec.30, T.14 N., R.28 E., Apache County, Hydrologic Unit 15020002, on downstream side of center pier of bridge on private road, 1.5 mi upstream from Carrizo Creek, 4 mi upstream from Zion Reservoir, and 5.8 mi northwest of St. Johns.

DRAINAGE AREA.--1,007 mi^2, revised, of which 2.5 mi^2 is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good. Diversions above station for irrigation of about 10,200 acres, including 1,500 acres served by Lyman Canal. Regulation by many reservoirs above station (combined capacity, 46,900 acre-ft), the largest of which is Lyman Lake. Records do not include flow bypassing the station through an abandoned irrigation ditch during higher stages.

AVERAGE DISCHARGE.--13 years, 12.4 ft^3/s, 8,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 582 ft^3/s Aug. 4, 1983, gage height, 3.66 ft; minimum daily, 0.04 ft^3/s Aug. 2, Sept. 7, Oct. 16-20, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 165 ft^3/s Aug. 30, gage height, 2.74 ft; minimum daily, 0.62 ft^3/s June 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	12	10	10	12	12	9.8	6.1	3.4	3.2	7.1	40
2	3.7	19	11	10	11	12	9.9	11	2.6	2.9	2.0	22
3	3.2	13	11	10	12	12	9.5	12	.66	4.1	1.7	13
4	3.2	11	11	12	13	12	8.5	9.9	.86	3.7	2.4	11
5	3.1	9.8	12	13	13	11	8.8	8.9	1.6	3.8	2.6	10
6	3.1	9.9	12	15	12	11	9.5	7.2	1.5	4.2	2.6	6.2
7	3.2	10	12	15	11	11	8.8	4.1	.92	4.0	2.7	6.3
8	3.4	10	13	12	10	11	8.0	2.2	.98	3.7	2.6	6.3
9	3.0	9.2	13	10	10	11	8.1	1.9	1.0	3.8	2.7	5.1
10	3.1	8.4	12	10	11	10	8.9	2.0	1.1	4.0	2.8	3.5
11	3.2	8.3	12	10	10	10	10	2.1	1.3	3.9	2.8	4.1
12	3.4	8.3	12	11	10	10	8.1	1.8	1.5	4.0	3.9	6.8
13	3.7	8.3	10	11	10	10	5.4	1.8	1.8	3.4	3.1	6.7
14	3.8	8.3	8.8	10	9.9	10	8.4	2.4	2.4	2.1	2.6	5.9
15	4.1	8.1	e8.0	9.9	9.9	10	11	3.0	2.5	2.6	2.5	5.5
16	4.3	9.2	e9.0	11	10	10	16	3.1	2.5	2.8	2.9	5.5
17	4.6	9.3	14	11	10	9.8	20	3.3	3.3	3.3	2.8	5.2
18	4.8	9.6	19	12	11	9.7	37	2.6	3.4	3.0	3.0	4.7
19	4.9	10	17	12	11	9.8	31	3.5	4.0	3.1	3.2	3.4
20	5.1	10	16	11	11	9.8	15	2.8	4.6	3.6	3.0	3.4
21	5.1	10	15	8.5	11	9.5	12	2.2	3.7	2.8	2.7	3.4
22	5.4	10	14	9.1	11	9.2	12	2.8	3.7	2.2	2.8	3.2
23	7.5	10	13	11	11	9.1	11	3.2	1.6	3.3	3.3	3.4
24	8.5	10	12	19	11	9.0	11	3.5	6.0	1.9	11	2.7
25	8.3	9.9	11	24	11	8.9	12	3.7	2.8	1.2	98	2.6
26	8.3	10	8.9	15	11	9.2	11	4.2	.83	2.3	33	2.6
27	8.3	9.8	7.9	11	20	8.6	11	4.1	.81	1.6	14	2.9
28	8.2	9.9	7.0	12	18	8.2	11	3.0	.62	1.7	13	2.2
29	7.8	9.6	11	12	13	8.3	11	3.0	2.5	1.7	20	2.1
30	9.9	10	14	13	---	8.9	6.7	4.5	4.8	2.2	71	2.3
31	9.6	---	12	13	---	9.0	---	5.0	---	2.6	75	---
TOTAL	161.9	300.9	368.6	373.5	334.8	310.0	360.4	130.9	69.28	92.7	402.8	202.0
MEAN	5.22	10.0	11.9	12.0	11.5	10.0	12.0	4.22	2.31	2.99	13.0	6.73
MAX	9.9	19	19	24	20	12	37	12	6.0	4.2	98	40
MIN	3.0	8.1	7.0	8.5	9.9	8.2	5.4	1.8	.62	1.2	1.7	2.1
AC-FT	321	597	731	741	664	615	715	260	137	184	799	401

CAL YR 1987 TOTAL 7463.9 MEAN 20.4 MAX 253 MIN 1.2 AC-FT 14800
WTR YR 1988 TOTAL 3107.78 MEAN 8.49 MAX 98 MIN .62 AC-FT 6160

e Estimated

09386030 LITTLE COLORADO RIVER ABOVE ZION RESERVOIR, NEAR ST. JOHNS, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1980 to current year.

WATER QUALITY DATA

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
MAR 1988												
17...	0945	9.21	2650	8.4	3.0	2.5	--	630	12	100	--	--

DATE	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HYDROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
MAR 1988												
17...	610	290	150	58	390	7	20	360	320	19	--	320

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
MAR 1988												
17...	680	280	2.0	18	--	1790	2.44	--	--	--	<0.10	--

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P) (00673)
MAR 1988											
17...	--	--	--	--	--	--	--	0.01	0.03	--	--

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
MAR 1988											
17...	--	--	--	--	--	--	--	--	660	--	--

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR) (01032)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)
MAR 1988											
17...	--	--	--	--	--	--	--	--	10	--	--

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)
MAR 1988											
17...	--	30	--	--	--	--	--	--	--	--	--

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	CYANIDE TOTAL (MG/L AS CN) (00720)	CYANIDE DISSOLVED (MG/L AS CN) (00723)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
MAR 1988											
17...	--	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM

LOCATION.--Lat 35°06'03", long 108°45'03", in NE¼ sec.17, T.10 N., R.18 W., McKinley County, Hydrologic Unit 15020004, on Zuni Indian Reservation, on left bank downstream from highway bridge on State Highway 36, 0.8 mi upstream from flow line of Black Rock Reservoir, 2.3 mi northeast of Black Rock, and 5.9 mi northeast of Zuni Pueblo.

DRAINAGE AREA.--848 mi^2, revised, of which 13 mi^2 is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1969 to current year. Prior to October 1974 published as "above Zuni Reservoir".

GAGE.--Water-stage recorder, crest-stage gage and concrete control. Elevation of gage is 6,480 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: July 20 to Aug. 17 and Sept. 20-30. Water-discharge records good except for estimated daily discharges, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--19 years, 13.7 ft^3/s, 9,930 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,200 ft^3/s, Aug. 4, 1974, gage height, 6.61 ft, from rating curve extended above 670 ft^3/s on basis of slope-area measurements at gage heights 4.05 ft, 3.94 ft, 5.16 ft, and 6.61 ft; no flow for many days.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 3	0600	*203	*3.97

No flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC		FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.66	2.3	1.8	1.	20	11	2.7	5.6	.47	.71	.40	11
2	.85	5.1	1.8	1.3	22	10	2.6	4.7	.46	.43	.04	4.9
3	1.1	3.9	2.0	1.3	157	9.9	2.5	4.2	.44	.63	.50	3.2
4	.69	2.0	2.1	1.4	61	9.8	2.2	4.2	.57	.30	.60	1.8
5	.44	1.6	2.2	1.7	17	9.8	2.0	4.0	.44	.29	60	1.5
6	.22	3.5	2.2	2.7	8.2	9.8	1.9	3.6	.40	.21	.60	1.4
7	.26	3.4	2.0	3.7	8.0	9.4	1.8	3.0	.33	.17	1.0	1.4
8	.26	1.8	2.0	3.2	14	8.4	1.7	2.5	.21	.03	1.1	1.3
9	.16	1.5	1.9	2.3	12	8.1	1.5	2.2	.11	.00	1.2	1.2
10	.05	1.5	1.9	1.7	11	6.4	1.4	2.1	.04	.08	1.3	1.2
11	.00	1.5	2.0	1.7	10	5.2	1.4	2.0	.01	.39	1.4	1.5
12	.00	1.5	2.0	1.8	9.4	5.1	1.3	1.8	.04	.45	1.2	3.5
13	.01	1.5	2.0	1.7	8.5	5.3	1.3	1.7	.06	.37	1.0	7.1
14	.06	1.5	2.1	1.6	7.3	4.9	1.4	1.6	.03	.22	1.0	4.3
15	.09	1.9	1.8	1.6	6.2	4.9	1.4	1.5	.00	.29	1.0	2.7
16	.18	2.2	1.6	1.6	5.7	5.0	2.9	1.5	.00	.29	1.0	2.2
17	.34	1.9	1.7	1.6	5.3	4.6	4.3	1.5	.04	.31	1.2	2.8
18	.42	1.8	2.3	1.6	4.4	4.8	4.1	1.8	.12	.46	1.4	3.5
19	.36	1.7	2.6	1.6	4.6	4.4	3.0	1.8	.06	.65	1.4	3.1
20	.31	1.9	2.6	1.7	5.8	4.0	2.3	1.5	.03	.40	.86	1.0
21	.32	2.2	2.4	1.7	5.4	3.9	1.9	1.4	.01	.40	.66	.39
22	.33	2.1	2.4	1.9	5.0	3.6	2.2	1.2	.00	.30	.60	.89
23	.39	2.1	2.3	1.6	4.5	3.2	2.8	.91	.00	.40	2.5	1.0
24	.49	2.0	2.2	1.5	32	3.1	5.1	.80	.00	.40	.75	1.0
25	.52	2.0	2.1	1.4	57	3.0	6.4	.76	.30	.50	5.6	.80
26	.52	2.1	2.0	1.4	31	3.0	7.0	.79	.80	.40	1.7	.80
27	.53	2.1	1.9	1.5	25	2.9	7.4	.87	1.5	.30	6.9	1.0
28	.52	2.0	1.7	1.7	25	2.7	7.4	.76	2.0	.40	11	.70
29	.52	1.8	1.6	2.3	22	2.3	7.5	.50	2.5	.40	4.4	1.2
30	1.2	1.9	1.7	15	---	2.5	6.8	.39	1.4	.40	3.9	1.4
31	1.8	---	1.7	26	---	2.7	---	.43	---	.50	14	---
TOTAL	13.60	64.3	62.6	93.2	604.3	173.7	98.2	61.61	12.37	11.08	70.71	69.78
MEAN	.44	2.14	2.02	3.01	20.8	5.60	3.27	1.99	.41	.36	2.28	2.33
MAX	1.8	5.1	2.6	26	157	11	7.5	5.6	2.5	.71	14	11
MIN	.00	1.5	1.6	1.3	4.4	2.3	1.3	.39	.00	.00	.04	.39
AC-FT	27	128	124	185	1200	345	195	122	25	22	140	138

CAL YR 1987 TOTAL 6361.44 MEAN 17.4 MAX 347 MIN .00 AC-FT 12620
WTR YR 1988 TOTAL 1335.45 MEAN 3.65 MAX 157 MIN .00 AC-FT 2650

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SPE-CIFIC CON-DUCT-ANCE LAB (US/CM) (90095)	PH (STAND-ARD UNITS) (00400)	PH LAB (STAND-ARD UNITS) (00403)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV 17...	1515	2.0	800	801	8.20	8.30	7.5	1.5	12.4	260	63	68
JAN 20...	1240	1.7	680	766	7.90	8.20	-4.0	0.0	12.4	270	0	72
MAR 01...	1430	10	520	521	8.00	8.20	14.5	12.0	9.5	200	0	48
MAY 18...	1220	2.0	630	666	8.20	8.30	30.5	15.0	8.0	250	40	59
JUL 15...	1030	0.37	590	611	8.40	8.20	20.5	20.0	7.0	210	0	43
AUG 17...	1400	1.2	370	375	8.30	7.80	31.0	21.5	6.4	140	0	40

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
NOV 17...	23	69	2	6.2	350	0	287	202	110	23	0.40	15
JAN 20...	23	67	2	3.8	182	0	149	307	98	18	0.40	17
MAR 01...	19	37	1	4.6	195	0	160	214	52	13	0.40	7.2
MAY 18...	24	14	0.4	1.4	314	5	265	206	61	16	0.40	11
JUL 15...	25	61	2	4.7	295	22	278	271	45	11	0.40	2.8
AUG 17...	9.8	33	1	5.5	172	0	141	152	39	6.5	0.30	11

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
NOV 17...	436	1	1	90	<1	<1	2	<1	2	<1	10
JAN 20...	483	<1	<1	80	3	<1	2	2	5	8	16
MAR 01...	310	1	<1	60	<1	2	2	2	2	3	24
MAY 18...	310	1	1	110	2	<1	1	<1	4	1	25
JUL 15...	356	1	2	110	<1	2	1	<1	6	1	21
AUG 17...	236	<1	1	70	1	<1	15	<1	25	3	150

< Actual value is known to be less than value shown.

09386950 ZUNI RIVER ABOVE BLACK ROCK RESERVOIR, NM--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
NOV											
17...	<5	<5	<0.10	<0.1	<1	<1	<10	4	101	0.54	73
JAN											
20...	<5	<5	<0.10	<0.1	<1	<1	<10	<3	31	0.14	87
MAR											
01...	<5	<5	<0.10	--	<1	<1	20	5	52	1.5	98
MAY											
18...	<5	<5	<0.10	<0.1	<1	<1	<10	8	54	0.30	94
JUL											
15...	<5	<5	<0.10	<0.1	<1	<1	30	12	152	0.15	98
AUG											
17...	12	<5	0.10	<0.1	<1	<1	60	8	--	--	--

< Actual value is known to be less than value shown.

09387300 ZUNI RIVER AT NEW MEXICO-ARIZONA STATE LINE

LOCATION.--Lat 34°52'35", long 109°02'28", in SW¼SW¼ sec.34, T.7 N., R.21 W., Cibola County, Hydrologic Unit 15020004, on Zuni Indian Reservation, on the left bank 0.2 mi upstream from the New Mexico-Arizona State line, 5 mi southwest of Ojo Caliente, and 14 mi southwest of Zuni.

DRAINAGE AREA.--1,314 mi^2, of which 13 mi^2 is noncontributing.

PERIOD OF RECORD.--Water years October 1983 to April 1987 (annual maximum only), May 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,020 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 12, 1987 gage at site 200 ft upstream.

REMARKS.--Estimated daily discharges: Oct. 31 to Nov. 17. Records fair except for estimated daily discharges, which are poor. Flow partly regulated by Black Rock Reservoir 18 mi upstream. Several observations of water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 151 ft^3/s, Aug. 23, 1988, gage height, 3.60 ft, from rating curve extended above 1.0 ft^3/s on basis of step-backwater analysis; no flow most of time.

EXTREMES FOR 1987 WATER YEAR.--Maximum discharge, 130 ft^3/s, Mar. 25, gage height, 3.55 ft, site then use; no flow most of time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 151 ft^3/s, Aug. 23, gage height, 3.60 ft, from rating curve extended above 1.0 ft^3/s on basis of step-backwater analysis; no flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1								---	.00	.00	1.2	.00
2								---	.00	.00	.12	.00
3								--	.00	.00	.10	.00
4								---	.00	00	.15	.00
5								---	.00	.00	.24	.00
6								---	.00	.00	.00	.00
7								---	.00	.00	.00	.00
8								---	.11	.00	.52	.00
9								---	.02	.00	.76	.00
10								---	.00	.00	.23	.00
11								---	.00	.00	.04	.00
12								---	.00	.00	.18	.00
13								.00	.00	.00	.02	.00
14								.02	.00	.00	.00	.00
15								.00	.00	.00	.00	.00
16								.00	.00	.00	.00	.00
17								.00	.00	.00	.00	.00
18								.00	.00	.00	.00	.00
19								.00	.00	.00	.00	.00
20								.03	.00	.00	.00	.00
21								.18	.00	.00	.00	.00
22								.00	.00	.00	.10	.00
23								.00	.00	.00	.35	.00
24								.00	.00	.00	1.6	.00
25								.00	.00	.00	1.5	.00
26								.00	.00	.00	.86	.00
27								.00	.00	.00	.65	.00
28								.00	.00	.00	.34	.00
29								.00	.00	.00	.04	.00
30								.00	.00	.24	.00	.00
31								.00	---	.07	.00	---
TOTAL								---	.13	.31	9.00	.00
MEAN								---	.00	.01	.29	.00
MAX								---	.11	.24	1.6	.00
MIN								---	.00	.00	.00	.00
AC-FT								---	.3	.6	18	.00

09387300 ZUNI RIVER AT NEW MEXICO-ARIZONA STATE LINE -- Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	6.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.05
2	.00	2.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	1.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
4	.00	.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11
6	.00	8.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	3.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	1.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.50	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.40	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.71	.00
17	.00	.10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.79	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	20	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	18	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.41	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.55	.00
30	2.1	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.50	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	2.60	23.70	.00	.00	.00	.00	.00	.00	.00	.00	40.46	.17
MEAN	.08	.79	.00	.00	.00	.00	.00	.00	.00	.00	1.31	.01
MAX	2.1	8.0	.00	.00	.00	.00	.00	.00	.00	.00	20	.11
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	5.2	47	.00	.00	.00	.00	.00	.00	.00	.00	80	.3

WTR YR 1988 TOTAL 66.93 MEAN .18 MAX 20 MIN .00 AC-FT 133

09390500 SHOW LOW CREEK NEAR LAKESIDE, AZ

LOCATION.--Lat 34°10'46", long 109°59'14", in SW¼NW¼ sec.14, T.9 N., R.22 E., Navajo County, Hydrologic Unit 15020005, on left bank 1 mi upstream from pumping plant on Show Low Lake, 1.8 mi northwest of Lakeside, 2.2 mi upstream from Jaques Dam, and 6 mi southeast of Show Low.

DRAINAGE AREA.--68.6 mi^2.

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WSP 1513: 1954-56. WSP 1926: Drainage area. WRD Ariz. 1971: 1970(M).

GAGE.--Water-stage recorder and concrete-dam control with V-notch sharp-crested weir. Elevation of gage is 6,610 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated periods, which are fair. Record shows inflow to Show Low Lake. Flow partly regulated by several small reservoirs, largest of which are Rainbow Lake and Scott Reservoir, combined capacity, 2,400 acre-ft. Diversions for irrigation of about 250 acres above station.

AVERAGE DISCHARGE.--35 years, 14.9 ft^3/s, 10,800 acre-ft/yr; median of yearly mean discharges, 10 ft^3/s, 7,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,550 ft^3/s Dec. 18, 1978 , gage height, 9.16 ft, from rating curve extended above 2,500 ft^3/s; maximum gage height, 9.53 ft Dec. 26, 1971; no flow Oct. 5, 6, Dec. 10-19, 1964, Jan. 4-15, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 3	1245	259	3.49	Apr. 23	0145	177	3.26
Feb. 27	0730	167	3.23	Aug. 31	1015	*890	*4.67

Minimum daily discharge, 1.7 ft^3/s June 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	11	2.3	8.2	16	51	3.5	13	2.5	14	9.8	185
2	2.7	6.8	2.2	7.9	28	39	3.8	12	2.6	13	10	133
3	2.9	3.2	2.1	7.5	204	31	3.3	11	2.6	13	9.6	52
4	3.0	2.7	2.1	7.8	129	23	3.3	11	2.3	12	9.1	26
5	3.1	2.9	2.6	8.6	68	19	3.2	12	2.4	12	8.8	15
6	3.0	3.7	2.6	13	52	18	3.2	13	2.0	12	25	12
7	3.0	2.9	2.4	12	45	17	3.1	13	2.0	10	11	11
8	3.1	2.6	2.4	11	39	15	4.0	13	1.8	9.4	8.1	9.7
9	3.0	2.6	2.6	11	38	14	5.2	12	1.8	8.8	7.8	9.1
10	2.8	2.5	2.8	11	39	12	5.4	8.7	1.8	8.8	7.0	8.4
11	3.3	2.5	2.8	10	37	11	5.5	7.6	1.7	8.4	7.7	8.6
12	3.4	2.4	2.8	8.1	34	11	5.6	7.2	1.8	8.2	8.7	12
13	3.5	2.4	3.0	7.9	36	11	5.7	7.5	2.0	8.0	7.6	8.9
14	3.7	2.5	3.0	7.9	34	11	6.7	7.3	10	7.9	13	7.7
15	3.6	2.8	3.0	7.1	28	11	5.8	6.7	12	7.8	12	6.8
16	3.7	2.7	3.1	7.6	27	10	11	6.8	12	8.4	12	6.0
17	2.9	2.6	3.5	8.2	27	9.7	11	6.6	12	8.7	9.2	5.3
18	2.6	2.5	4.4	14	20	8.9	18	7.3	13	9.4	9.0	4.6
19	2.2	2.5	4.0	13	17	8.9	17	7.3	13	9.8	13	4.2
20	2.1	2.6	4.3	11	14	8.0	42	6.7	12	9.5	14	e3.5
21	2.2	2.5	4.2	9.6	14	8.1	43	6.4	12	9.8	19	e3.0
22	2.3	2.4	4.3	9.0	14	7.5	121	5.1	12	9.4	29	e2.8
23	3.6	2.4	4.3	8.6	16	7.5	142	4.4	12	8.9	e19	e2.7
24	3.3	2.3	4.7	8.4	18	7.1	140	4.2	12	9.2	10	e2.7
25	2.9	2.3	5.5	7.9	24	6.8	85	4.1	13	9.5	9.1	e2.6
26	2.8	2.3	5.5	7.8	46	6.4	50	4.3	12	9.3	6.6	e2.6
27	2.6	2.3	5.8	8.4	148	6.4	35	3.7	12	8.8	8.7	e2.6
28	2.6	2.3	5.6	9.1	103	6.3	23	3.3	12	8.7	e16	e2.6
29	2.7	2.3	5.9	10	65	5.6	17	3.1	13	8.7	26	e2.6
30	3.2	2.3	5.9	18	---	4.6	15	2.8	13	10	19	e2.6
31	3.4	---	7.5	18	---	3.7	---	2.7	---	11	247	---
TOTAL	92.5	89.8	117.4	307.6	1380	409.5	837.3	233.8	234.3	302.4	622.7	555.6
MEAN	2.98	2.99	3.79	9.92	47.6	13.2	27.9	7.54	7.81	9.75	20.1	18.5
MAX	3.7	11	7.5	18	204	51	142	13	13	14	247	185
MIN	2.1	2.3	2.1	7.1	14	3.7	3.1	2.7	1.7	7.8	6.6	2.6
AC-FT	183	178	233	610	2740	812	1660	464	465	600	1240	1100

CAL YR 1987 TOTAL 7806.4 MEAN 21.4 MAX 366 MIN 2.1 AC-FT 15480
WTR YR 1988 TOTAL 5182.9 MEAN 14.2 MAX 247 MIN 1.7 AC-FT 10280

e Estimated

09391000 SHOW LOW LAKE NEAR SHOW LOW, AZ

LOCATION.--Lat 34°11'35", long 110°00'15", in NW¼ sec.10, T.9 N., R.22 E., Navajo County, Hydrologic Unit 15020005, on upstream side of left end of Jaques Dam on Show Low Creek, 3.4 mi northwest of Lakeside, and 4.5 mi southeast of Show Low.

DRAINAGE AREA.--73.0 mi^2.

PERIOD OF RECORD.--June 1953 to current year. Periodic readings of elevation and contents only, 1953-1985, published with record of Show Low Creek below Jaques Dam near Show Low, AZ (09392000).

GAGE.--Water-stage recorder, with periodic supplemental lake elevation readings. Altitude of gage is 6500.0 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by an earthen-rock dam; storage began in spring of 1953. The spillway is a concrete, broad-crested Ogee weir. Total capacity to spillway, 6,176 acre-ft, consisting of 1,070 acre-ft dead storage below elevation 6,535.0 ft (sill of outlet structure) and 5,106 acre-ft usable storage between elevation 6,535.0 ft and 6,570.0 ft (sill of overflow spillway). Capacity table prepared by Leeds, Hill, and Jewett, consulting engineers, from surveys by the firm. Water cannot be pumped when lake elevation is below 6,538.5 ft (sill of intake to pumping plant), but can be released to stream channel down to elevation 6,535.0 ft. Figures given herein represent total contents.

COOPERATION.--Periodic observations of lake elevation furnished by Navapache Electric Company.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 6,920 acre-ft Dec. 18, 1978 and Dec. 27, 1984; maximum elevation, 6,573.72 ft Dec. 27, 1984; minimum contents, not determined.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 6,240 acre-ft Feb. 27, elevation 6,570.33 ft; minimum, 4,240 acre-ft Oct. 22-26, elevation 6,559.27 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4370	4320	4430	4680	5040	6210	5480	6110	5970	5060	4610	6170
2	4370	4330	4440	4700	5090	6200	5440	6130	5930	5040	4620	6220
3	4360	4340	4440	4720	5530	6200	5400	6150	5890	5020	4630	6200
4	4350	4350	4450	4730	5790	6200	5350	6160	5850	5000	4630	6190
5	4350	4350	4450	4750	5940	6200	5310	6160	5800	4980	4640	6180
6	4340	4360	4460	4780	6060	6200	5260	6150	5750	4960	4700	6180
7	4340	4360	4460	4800	6150	6180	5220	6160	5710	4950	4720	6180
8	4330	4360	4460	4820	6200	6170	5180	6170	5660	4930	4730	6180
9	4320	4370	4470	4840	6200	6170	5130	6170	5610	4900	4740	6180
10	4310	4370	4470	4870	6200	6150	5090	6170	5570	4870	4760	6180
11	4310	4370	4470	4880	6190	6140	5050	6170	5520	4850	4760	6180
12	4310	4380	4480	4890	6200	6120	5020	6170	5470	4820	4780	6180
13	4300	4380	4480	4910	6200	6110	4980	6160	5430	4790	4780	6170
14	4300	4380	4490	4920	6200	6100	4950	6150	5400	4760	4800	6170
15	4290	4380	4500	4950	6200	6080	4920	6150	5380	4730	4810	6170
16	4290	4390	4510	4960	6200	6060	4900	6150	5360	4700	4840	6180
17	4280	4390	4520	4990	6190	6030	4890	6140	5340	4680	4850	6170
18	4270	4390	4530	5020	6190	5990	4890	6140	5320	4640	4860	6160
19	4260	4400	4540	5040	6190	5970	4880	6140	5300	4620	4890	6160
20	4260	4400	4550	5060	6180	5940	4920	6130	5280	4590	4940	6140
21	4250	4400	4560	5070	6190	5910	4980	6130	5250	4570	4980	6130
22	4240	4410	4570	5060	6190	5870	5200	6120	5230	4560	5040	6120
23	4240	4410	4570	5050	6190	5850	5450	6110	5200	4560	5090	6120
24	4240	4410	4580	5040	6190	5800	5690	6100	5180	4570	5100	6120
25	4240	4410	4600	5030	6200	5770	5830	6090	5160	4570	5120	6110
26	4240	4420	4610	5020	6220	5730	5920	6080	5140	4570	5120	6110
27	4250	4420	4620	5010	6240	5700	5990	6070	5120	4570	5130	6110
28	4250	4420	4630	5010	6230	5650	6030	6060	5100	4580	5170	6100
29	4260	4420	4650	5000	6220	5620	6070	6030	5090	4580	5240	6100
30	4260	4430	4650	5010	---	5570	6100	6020	5080	4600	5280	6100
31	4280	---	4670	5030	---	5520	---	6010	---	4610	5800	---
MAX	4370	4430	4670	5070	6240	6210	6100	6170	5970	5060	5800	6220
MIN	4240	4320	4430	4680	5040	5520	4880	6010	5080	4560	4610	6100
*	6559.48	6560.38	6561.79	6563.84	6570.23	6566.56	6569.60	6569.12	6564.14	6561.46	6568.04	6569.59
**	-110	+150	+240	+360	+1190	-700	+580	-90	-930	-470	+1190	+300

CAL YR 1987 MAX 6300 MIN 2720 ** +1960
WTR YR 1988 MAX 6240 MIN 4240 ** +1710

* Elevation, in feet, at end of month.
** Change in contents in acre-feet.

09392000 SHOW LOW CREEK BELOW JAQUES DAM, NEAR SHOW LOW, AZ

LOCATION.--Lat 34°11'47", long 110°00'13", in NW¼ sec.10, T.9 N., R.22 E., Navajo County, Hydrologic Unit 15020005, on right bank just downstream from Jaques Dam, 3.5 mi northwest of Lakeside, and 4.5 mi southeast of Show Low.

DRAINAGE AREA.--73.0 mi^2.

PERIOD OF RECORD.--November 1941 to January 1945, June 1953 to September 1955 (monthly discharge only), October 1955 to current year. Monthly discharge only November 1941 to January 1945, published in WSP 1313. Published as "at Jaques damsite, near Lakeside" 1941-45.

REVISED RECORDS.--WSP 1926: Drainage area. WDR AZ-81-1: 1979 (M).

GAGE.--Water-stage recorder and sharp-crested weir, with supplementary water-stage recorder on lake for recording flow over concrete spillway. Elevation of gage is 6,530 ft above National Geodetic Vertical Datum of 1929, from topographic map. November 1941 to January 1945 nonrecording gage at site 100 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Record since 1953 shows release from Show Low Lake. Flow regulated by several reservoirs, largest of which are Show Low Lake, completed in 1953; Rainbow Lake, completed prior to 1941; and Scott Reservoir, completed in 1946 (combined capacity, 8,800 acre-ft). Diversions for irrigation of about 250 acres above Show Low Lake and diversion by pumping of floodwater stored in Show Low Lake to Forestdale Creek in Salt River basin (see record for Forestdale Creek diversion from Show Low Creek, near Show Low, elsewhere in this report).

AVERAGE DISCHARGE.--35 years (water years 1954-88), 8.83 ft^3/s, 6,400 acre-ft/yr; median of yearly mean discharges, 3.9 ft^3/s, 2,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft^3/s, spillway flow entering 0.2 mi downstream from station, Dec. 27, 1984, lake elevation, 6,573.72 ft, from rating curve extended above 270 ft^3/s; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of January 18, 1952, discharge, 6,250 ft^3/s at site 5 mi downstream at Show Low, is the largest since at least 1940.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 124 ft^3/s Feb. 27; minimum daily, 0.60 ft^3/s Dec. 26-27, Apr. 26-27, Aug. 7-9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	.69	.69	.79	.69	49	4.9	.68	7.1	6.6	5.8	1.8
2	5.8	.69	.69	.79	.69	33	4.9	.69	7.1	6.6	5.8	80
3	5.8	.69	.69	.79	.69	23	4.9	3.2	7.1	6.6	5.8	39
4	5.8	.69	.69	.76	.69	21	4.9	5.2	7.1	6.6	5.8	15
5	5.8	.69	.69	.70	.69	22	4.9	5.2	7.1	6.6	5.8	9.6
6	5.8	.69	.69	.69	.69	22	4.9	5.2	7.0	6.6	4.4	7.5
7	5.8	.69	.69	.69	.69	14	4.9	5.2	6.9	2.0	.60	7.0
8	5.8	.69	.69	.69	15	2.8	4.9	5.2	6.9	2.0	.60	7.2
9	5.8	.69	.69	.69	26	2.6	4.9	8.0	6.9	5.3	.60	7.6
10	5.8	.69	.69	.69	26	.69	4.9	8.9	6.9	5.3	1.0	4.3
11	5.8	.69	.69	.73	25	.69	4.9	7.9	6.9	5.3	1.8	3.3
12	5.8	.69	.69	.70	23	.69	4.9	7.0	6.9	5.3	1.8	5.4
13	5.8	.69	.69	.71	23	.69	4.9	6.4	6.9	5.3	4.5	3.6
14	5.8	.69	.69	.72	19	2.1	4.8	6.4	6.9	5.3	5.8	3.7
15	5.8	.69	.68	.74	23	3.6	4.7	6.4	6.9	5.3	4.8	4.1
16	5.8	.69	.69	.77	20	3.6	4.7	6.4	6.9	5.3	1.4	4.8
17	5.8	.69	.69	.78	12	3.5	4.7	6.4	6.9	5.7	1.4	3.2
18	5.8	.69	.69	.78	10	3.5	4.7	6.5	6.9	6.9	1.4	2.4
19	5.8	.69	.69	.78	10	3.5	4.7	6.5	6.9	6.9	1.4	5.1
20	5.8	.69	.69	.73	9.0	3.5	2.0	5.6	6.9	6.9	1.4	5.1
21	5.8	.69	.69	.74	10	3.5	.69	7.1	6.9	5.9	1.4	5.1
22	5.8	.69	.69	.69	13	3.5	.69	7.1	6.9	6.3	1.4	4.1
23	5.8	.69	.70	.69	15	3.5	.69	7.1	6.8	5.8	1.4	3.7
24	5.8	.69	.69	.71	17	3.5	.69	7.1	6.7	5.8	1.4	3.7
25	3.6	.69	.67	.76	25	3.5	.64	7.1	6.7	5.8	1.4	3.7
26	.69	.69	.60	.85	38	4.5	.60	7.1	6.7	5.8	1.4	3.7
27	.69	.69	.60	.87	124	5.1	.60	7.1	6.6	5.8	1.4	3.7
28	.69	.69	.63	.71	113	5.0	.63	7.1	6.6	5.8	1.4	3.7
29	.69	.69	.74	.69	73	5.0	.65	7.1	6.6	5.8	1.5	3.7
30	.69	.69	.79	.69	---	5.0	.67	7.1	6.6	5.8	1.5	3.7
31	.69	---	.79	.69	---	4.9	---	7.1	---	5.8	1.6	---
TOTAL	146.94	20.70	21.38	22.81	673.83	262.46	100.55	191.07	206.2	177.8	77.70	258.5
MEAN	4.74	.69	.69	.74	23.2	8.47	3.35	6.16	6.87	5.74	2.51	8.62
MAX	5.8	.69	.79	.87	124	49	4.9	8.9	7.1	6.9	5.8	80
MIN	.69	.69	.60	.69	.69	.69	.60	.68	6.6	2.0	.60	1.8
AC-FT	291	41	42	45	1340	521	199	379	409	353	154	513

CAL YR 1987 TOTAL 4518.02 MEAN 12.4 MAX 294 MIN .60 AC-FT 8960
WTR YR 1988 TOTAL 2159.94 MEAN 5.90 MAX 124 MIN .60 AC-FT 4280

09393500 SILVER CREEK NEAR SNOWFLAKE, AZ

LOCATION.--Lat 34°40'00", long 110°02'30", in SW¼NW¼ sec.29, T.15 N., R.22 E., Navajo County, Hydrologic Unit 15020005, on left bank 6 mi upstream from mouth and 11 mi north of Snowflake.

DRAINAGE AREA.--925 mi², revised, of which 79 mi² is noncontributing.

PERIOD OF RECORD.--October 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 5,204.1 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for days of estimated record, which are fair. Diversions for irrigation above station of about 6,600 acres. Flow regulated by several reservoirs - combined capacity, about 22,100 acre-ft.

AVERAGE DISCHARGE.--38 years, 18.8 ft³/s, 13,620 acre-ft/yr; median of yearly mean discharges, 14 ft³/s, 10,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft³/s Jan. 19, 1952, gage height, 18.0 ft, from rating curve extended above 4,400 ft³/s on basis of peak discharge for former station near Woodruff; no flow for several days in water years 1971, 1974-78, 1980-82, 1984, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s and maximum (*):

Date	Time	Discharges (ft³/s)	Gage Height (ft)
Feb. 3	2315	*737	*5.26

Minimum daily discharge, 0.01 ft³/s Mar. 28-31 and Apr. 13-14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	102	7.8	e6.0	4.9	3.3	.05	4.3	2.6	17	7.7	13
2	4.3	69	7.3	e6.0	5.4	3.4	.83	1.5	.96	8.7	7.5	10
3	6.5	32	7.1	e6.0	35	4.3	.63	2.1	2.8	7.6	12	8.2
4	10	25	6.8	e6.0	305	3.4	.48	1.1	1.8	4.1	15	6.3
5	9.0	22	6.5	e6.0	81	3.4	.56	2.8	.64	3.7	13	4.0
6	7.2	15	5.2	8.2	37	3.0	.42	2.9	.79	5.4	83	1.3
7	2.7	12	6.8	21	21	2.4	.52	2.6	.88	6.9	75	.56
8	1.5	10	6.4	e30	14	2.2	.83	3.6	1.6	4.5	28	2.1
9	2.2	9.5	6.9	e20	9.6	2.1	.49	4.2	2.5	2.6	18	1.4
10	1.5	8.8	7.4	e15	7.5	2.5	.24	1.8	1.3	5.9	9.3	5.2
11	4.4	8.5	7.4	13	5.9	2.6	.11	2.4	2.1	4.1	10	2.1
12	2.9	8.5	7.1	12	6.5	2.1	.03	1.8	1.6	4.0	9.8	36
13	2.7	7.9	6.7	11	9.6	1.6	.01	.67	.97	2.1	7.8	10
14	7.1	7.6	5.9	e10	8.6	1.2	.01	.39	.85	1.3	7.5	8.3
15	11	6.4	5.4	e7.5	6.7	.54	.31	1.5	.41	3.1	38	9.1
16	12	6.0	5.2	e7.5	7.7	.81	1.6	1.8	.37	2.5	98	4.6
17	6.5	6.8	5.4	6.1	7.5	1.4	1.6	2.0	.99	1.5	23	2.6
18	11	6.5	6.4	6.8	5.9	1.4	5.4	2.6	2.4	2.3	22	2.6
19	11	6.0	7.1	e6.5	5.6	1.1	3.3	2.0	2.1	2.3	59	1.8
20	13	5.5	7.0	e6.5	5.2	.93	1.4	3.4	4.0	2.5	12	1.0
21	10	5.7	6.7	e6.5	5.1	1.5	3.2	2.9	2.3	2.9	7.3	7.4
22	5.5	6.0	6.5	e6.5	4.5	1.1	2.4	2.7	1.7	2.7	34	3.9
23	13	6.5	6.4	6.3	3.9	.63	8.6	1.6	1.6	3.3	14	3.4
24	24	7.0	5.9	5.9	3.6	.28	28	1.4	1.2	2.0	16	6.5
25	19	6.1	e6.0	6.2	3.2	.20	34	.57	7.1	1.1	13	3.2
26	11	6.7	e6.0	5.9	3.1	.15	18	2.7	2.7	30	19	4.5
27	6.6	6.2	e6.0	5.7	3.6	.08	13	2.1	5.0	3.5	13	5.1
28	7.8	6.0	e6.0	5.2	4.0	.02	10	3.9	38	2.0	32	5.1
29	8.8	6.3	e6.0	4.4	3.8	.01	7.8	4.8	36	2.7	23	5.5
30	63	5.8	e6.0	5.4	---	.01	3.5	4.4	23	9.5	15	6.3
31	17	---	e6.0	5.3	---	.01	---	4.5	---	14	19	---
TOTAL	318.1	437.3	199.3	274.4	624.4	47.67	147.32	77.03	150.26	165.8	760.9	181.06
MEAN	10.3	14.6	6.43	8.85	21.5	1.54	4.91	2.48	5.01	5.35	24.5	6.04
MAX	63	102	7.8	30	305	4.3	34	4.8	38	30	98	36
MIN	1.5	5.5	5.2	4.4	3.1	.01	.01	.39	.37	1.1	7.3	.56
AC-FT	631	867	395	544	1240	95	292	153	298	329	1510	359

CAL YR 1987 TOTAL 4741.85 MEAN 13.0 MAX 371 MIN .01 AC-FT 9410
WTR YR 1988 TOTAL 3383.54 MEAN 9.24 MAX 305 MIN .01 AC-FT 6710

e Estimated

09394500 LITTLE COLORADO RIVER AT WOODRUFF, AZ

LOCATION.--Lat 34°46'58", long 110°02'37", in NE¼SW¼ sec.17, T.16 N., R.22 E., Navajo County, Hydrologic Unit 15020002, on left bank at abandoned county road bridge in Woodruff, 3.7 mi downstream from Silver Creek.

DRAINAGE AREA.--8,072 mi^2, revised, of which 297 mi^2 is noncontributing.

PERIOD OF RECORD.--March to May 1905; June to July 1905 (gage heights only); August 1905 to May 1907; July 1907 to April 1908, July to October 1908, December 1908, and December 1915 to September 1916 (gage heights only); October 1916 to August 1917 (monthly discharge only); September 1917 to March 1918, December 1918 to December 1919, April 1929 to December 1933, September 1935 to current year. Published as "near Woodruff" 1916-19, 1929-48.

REVISED RECORDS.--WSP 1049: 1917. WSP 1213: 1906, 1919(M).

GAGE.--Water-stage recorder. Datum of gage is 5,130.3 ft above National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Sept. 22, 1949.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions above station for irrigation of about 22,000 acres, including a pump installation 1,000 ft upstream installed in spring of 1973. Some regulation by reservoirs above station; combined capacity, about 81,400 acre-ft.

AVERAGE DISCHARGE.--59 years (water years 1906, 1917, 1930-33, 1936-88), 53.0 ft^3/s, 38,400 acre-ft/yr; median of yearly mean discharges, 44 ft^3/s, 31,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge not determined, occurred Jan. 19, 1916; maximum discharge recorded, 25,000 ft^3/s Dec. 5, 1919; maximum gage height, 22.9 ft from high-water mark in gage well, Dec. 19, 1978; no flow at times in most years prior to 1960 and in 1974, 1976, and 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	2345	*1,680	*10.53

Minimum daily discharge, 1.7 ft^3/s Mar. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	393	7.0	e7.1	10	10	2.3	6.1	4.6	50	17	203
2	6.2	726	8.6	e7.9	9.9	8.7	2.3	5.2	3.7	42	21	e35
3	4.7	e58	7.9	e7.9	11	8.2	2.7	4.5	2.0	56	16	e25
4	6.2	e17	7.7	8.7	316	7.9	2.6	4.4	3.7	42	21	14
5	6.2	e18	8.0	10	126	7.8	2.5	3.2	3.4	e21	16	10
6	6.3	e35	6.9	51	55	7.6	2.7	5.4	2.0	e13	68	7.8
7	3.7	42	7.2	103	29	7.2	2.7	4.5	2.7	e7.9	116	5.4
8	2.5	20	7.6	57	18	6.7	2.7	4.9	2.6	e5.2	44	4.5
9	2.1	13	7.6	35	15	6.7	2.4	6.2	3.5	e4.4	26	4.9
10	2.9	11	7.9	26	12	6.3	2.6	5.1	3.6	e3.8	18	5.6
11	2.7	10	7.9	22	10	6.3	2.5	4.1	3.2	e3.8	13	8.0
12	3.4	9.9	7.7	20	9.2	6.5	2.1	4.6	3.6	e3.8	23	231
13	2.4	9.5	7.9	20	11	5.8	2.4	3.9	2.7	4.0	35	e102
14	3.2	9.0	e8.5	20	12	5.6	2.8	3.2	2.9	2.7	16	e13
15	5.9	8.6	e8.5	16	9.9	5.9	2.6	3.0	2.4	3.3	36	e11
16	8.2	7.9	e8.5	14	10	5.3	3.4	4.3	2.5	4.3	450	e47
17	7.5	8.0	e8.5	14	11	5.1	64	3.9	2.2	3.8	111	6.5
18	7.1	8.2	e8.5	15	9.3	5.6	356	4.0	3.1	3.4	109	5.3
19	8.7	7.9	11	15	9.3	5.4	552	4.2	3.5	3.7	134	6.0
20	8.6	7.5	32	e15	9.0	5.1	e49	3.9	4.2	4.0	40	5.3
21	11	7.6	e21	e10	9.0	5.2	e16	4.5	4.7	3.9	76	6.9
22	6.9	7.4	28	e9.6	8.9	5.3	e16	4.3	3.3	4.4	86	9.1
23	6.2	7.9	16	e8.7	8.3	4.3	e15	4.1	2.7	3.1	46	6.6
24	17	7.7	10	e7.9	8.1	3.2	e15	2.6	3.2	4.4	61	8.7
25	17	7.7	8.4	e7.9	7.7	2.7	e15	2.3	12	3.4	88	8.1
26	9.9	7.8	e10	e8.7	7.8	2.6	e14	2.9	7.9	23	76	6.4
27	6.8	7.5	e6.6	e10	8.7	2.6	e14	3.7	23	7.0	130	8.2
28	5.1	7.0	e6.6	11	13	2.3	13	3.4	52	4.6	141	7.8
29	9.8	7.1	8.1	13	15	2.3	10	4.3	461	3.6	114	7.8
30	283	7.0	7.8	13	---	1.8	6.9	4.4	227	48	321	8.5
31	102	---	e6.6	12	---	1.7	---	3.7	---	34	262	---
TOTAL	578.3	1494.2	314.5	596.4	789.1	167.7	1197.2	128.8	858.9	421.5	2731	828.4
MEAN	18.7	49.8	10.1	19.2	27.2	5.41	39.9	4.15	28.6	13.6	88.1	27.6
MAX	283	726	32	103	316	10	552	6.2	461	56	450	231
MIN	2.1	7.0	6.6	7.1	7.7	1.7	2.1	2.3	2.0	2.7	13	4.5
AC-FT	1150	2960	624	1180	1570	333	2370	255	1700	836	5420	1640

CAL YR 1987 TOTAL 16419.83 MEAN 45.0 MAX 902 MIN .59 AC-FT 32570
WTR YR 1988 TOTAL 10106.0 MEAN 27.6 MAX 726 MIN 1.7 AC-FT 20050

e Estimated

09396100 PUERCO RIVER NEAR CHAMBERS, AZ

LOCATION.--Lat 35°10'42", long 109°27'15", in SW¼NW¼ sec.35, T.21 N., R.27 E., Apache County, Hydrologic Unit 15020007, on upstream side of right abutment of Atchison, Topeka, and Santa Fe Railway Co. bridge, 1.5 mi southwest of Chambers.

DRAINAGE AREA.--2,156 mi^2, revised, of which 50 mi^2 is noncontributing.

PERIOD OF RECORD.--Water years 1971-72 (annual maximums only), January 1973 to current year (daily mean discharge above 500 ft^3/s only).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,705 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor. Only daily mean discharges above 500 ft^3/s are published. Small diversions above station for irrigation and livestock. Red Lake, near the headwaters of Black Creek, was built in 1954; the capacity was 9,700 acre-ft, but capacity may have been reduced by silting.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,800 ft^3/s Sept. 30, 1971, gage height, 9.65 ft; no flow observed on many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 1	0130	*2,880	*4.97

No flow for several days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	546	---	---	---	---	---	---	e634
2	---	680	---	---	---	---	---	---	---	---	e679	---
3	---	---	---	---	1050	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	968	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	570
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	577	---	---	---	---	---
18	---	---	---	---	---	---	524	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	586	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	830	---
26	---	---	---	---	---	---	---	---	---	---	519	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	1010	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	794	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated

09397300 LITTLE COLORADO RIVER NEAR JOSEPH CITY, AZ

LOCATION.--Lat 34°54'04", long 110°15'17", in NE¼SE¼ sec.6, T.17 N., R.20 E., Navajo County, Hydrologic Unit 15020008, on left bank just upstream from diversion dam, 5.4 mi west of Holbrook, 5.7 mi southeast of Joseph City, and 8.5 mi downstream from Puerco River.

DRAINAGE AREA.--12,384 mi^2, revised, of which 347 mi^2 are noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1973 to current year (daily discharge only for those days on which instantaneous discharge exceeds 500 ft^3/s).

GAGE.--Water-stage recorder, crest-stage gage, and concrete diversion dam. Datum of gage is 5,031.10 ft above National Geodetic Vertical Datum of 1929 (Corps of Engineers bench mark). Prior to Jan. 9, 1980, on right bank at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Published record includes only those days when instantaneous discharge over the crest of the dam exceeds 500 ft^3/s. Diversions above station for irrigation of about 23,000 acres, diversions at dam on right bank of most low flows for irrigation of about 1,500 acres in vicinity of Joseph City. Some regulation by reservoirs; combined capacity of principal reservoirs, about 91,400 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,400 ft^3/s Dec. 19, 1978, gage height, 7.64 ft, from rating curve extended above 7,400 ft^3/s on basis of slope-area measurement at gage height 6.82 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 60,000 ft^3/s was determined for peak of Sept. 19, 1923, at Holbrook (see prior records for sta 09397000, Little Colorado River at Holbrook, for this peak and other peaks 1905-6, 1949-73).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 5,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	2030	*7,870	*6.43	Aug. 30	0030	5,660	5.53
Apr. 18	0200	7,150	6.12				

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	2670	---	---	516	---	---	---	---	---	---	1690
2	---	2610	---	---	823	---	---	---	---	---	376	1180
3	---	486	---	---	1770	---	---	---	---	---	---	282
4	---	---	---	---	1950	---	---	---	---	---	---	---
5	---	---	---	---	497	---	---	---	---	---	---	---
6	---	450	---	e245	---	---	---	---	---	---	e64	---
7	---	481	---	519	---	---	---	---	---	---	e326	---
8	---	---	---	---	---	---	---	---	---	---	e650	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	e54	---	---	---	---	---	---	---	912
13	---	---	---	---	---	---	---	---	---	---	---	562
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	e53	---
16	---	---	---	---	---	---	195	---	---	---	e567	---
17	---	---	---	---	---	---	1730	---	---	---	---	---
18	---	---	---	234	---	---	3440	---	---	---	---	---
19	---	---	---	---	---	---	1260	---	---	---	e154	---
20	---	---	---	---	---	---	215	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	318	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	e873	---
26	---	---	---	---	---	---	---	---	---	---	675	---
27	---	---	---	---	---	---	---	---	494	---	1140	---
28	---	---	---	---	---	---	---	---	e170	---	1280	---
29	---	---	---	---	---	---	---	---	470	---	e918	---
30	1670	---	---	519	---	---	---	---	392	---	1700	---
31	---	---	---	702	---	---	---	---	---	---	1550	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated

09397300 LITTLE COLORADO RIVER NEAR JOSEPH CITY, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1979 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since October 1981.

REMARKS.--Suspended-sediment load computed from load-discharge relation curves. Published record includes only those days on which instantaneous discharge exceeds 500 ft^3/s. See remarks for water-discharge records.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Record not available at time of publication

09398300 BLUE RIDGE RESERVOIR NEAR PINE, AZ

LOCATION.--Lat 34°33'19", long 111°11'00", in NE¼SE¼ sec.33, T.14 N., R.11 E., Coconino County, Hydrologic Unit 15020008, in Coconino National Forest, on upstream side of left end of spillway structure of Blue Ridge Dam on East Clear Creek, at mouth of General Springs Canyon, 7.3 mi east of Clints Well, and 20 mi northeast of Pine.

DRAINAGE AREA.--71.1 mi^2.

PERIOD OF RECORD.--December 1964 to March 1965 (periodic elevations only), April 1965 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,620 ft above National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD. Prior to Apr. 2, 1965, nonrecording-gage readings (at intervals of 3 to 8 days) at NGVD.

REMARKS.--Reservoir is formed by a concrete arch dam. Dam completed and storage began in December 1964. Total capacity is 19,500 acre-ft at elevation 6,735 ft, of which 15,000 acre-ft is usable storage below 6,720 ft, the spillway crest. Drawdown below 6,646.3 ft, 2,620 acre-ft restricted by sill at mouth of diversion tunnel since November 1981. Reservoir serves as a basin from which water is pumped to the East Verde River. (See records for East Verde River diversion from East Clear Creek, near Pine.) Release is possible through valve in base of dam. Figures given herein represent total contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 16,200 acre-ft Feb. 19, 1980, elevation, 6,724.12 ft; minimum contents since reservoir filled (April 1965), 1,450 acre-ft Nov. 18-27, 1981; minimum elevation, 6,630.75 ft Nov. 26, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 15,360 acre-ft Apr. 27, elevation, 6,721.32 ft; minimum, 5,500 acre-ft Jan. 18, elevation, 6,672.28 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)
(Based on surveys by Leeds, Hill, and Jewett, Inc., January 1962)

6,660	3,920	6,720	15,000
6,680	6,580	6,730	17,960
6,700	10,260		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7100	7350	7570	6070	5810	13330	15020	15070	13880	12260	10770	10750
2	7040	8010	7510	6030	5900	13660	14990	15050	13830	12230	10730	10810
3	6990	8190	7460	5990	6520	13930	14960	15040	13770	12210	10680	10820
4	6940	8250	7400	5950	7040	14160	14930	15030	13710	12150	10640	10800
5	6890	8280	7350	5910	7310	14390	14890	15010	13650	12100	10640	10770
6	6830	8400	7310	5880	7510	14610	14860	15010	13600	12040	10610	10730
7	6780	8500	7260	5840	7660	14860	14830	15010	13540	11990	10570	10680
8	6730	8540	7200	5810	e7800	15060	14790	15000	13480	11930	10530	10640
9	6680	8550	7150	5770	7950	15110	14750	15000	13430	11900	10480	10590
10	6620	8530	7100	5740	8120	15120	14720	14980	13370	11870	10440	10550
11	6570	8500	7050	5700	8280	15110	14670	14970	13320	11820	10390	10500
12	6520	8460	7000	5670	8440	15090	14630	14960	13260	11760	10340	10460
13	6490	8430	6950	5640	8640	15070	14580	14930	13200	11710	10290	10400
14	6430	8400	6900	5600	8830	15060	14530	14880	13150	e11650	10250	10360
15	6390	8360	6850	5560	8990	15050	14500	14820	13100	11590	10200	10310
16	6330	8320	6820	5530	9170	15040	14530	14770	13040	11540	10150	10260
17	6290	8270	6770	5510	9340	15030	14570	14720	12990	11480	10100	10210
18	6240	8230	6710	5510	9460	15030	14630	14700	12940	11430	10060	10160
19	6190	8180	6660	5510	9570	15030	14780	14640	12890	11390	10000	10120
20	6140	8130	6600	5520	9650	15030	14920	14580	12840	11330	9960	10080
21	6100	8080	6550	5520	9730	15050	15030	14520	12780	11290	9920	10060
22	6050	8040	6500	5530	9820	15060	15090	14470	12730	11240	9880	10020
23	6000	7990	6450	5540	9950	15090	15130	14420	12680	11190	9860	9980
24	5960	7950	6410	5540	10130	15110	15230	14360	12620	11140	9860	9930
25	5910	7900	6360	5550	10350	15120	15330	14290	12570	11090	9840	9880
26	5860	7840	6320	5560	10660	15140	15350	14240	12520	11030	9800	9830
27	5810	7780	6280	5580	11590	15130	15250	14180	12470	10980	9870	9790
28	5760	7730	6230	5590	12300	15100	15180	14120	12420	10940	9980	9730
29	5730	7680	6190	5620	12870	15100	15120	14060	12380	10900	10070	9680
30	5720	7620	6150	5680	---	15080	15090	14000	12320	10860	10150	9640
31	5740	---	6110	5740	---	15050	---	13940	---	10820	10480	---
MAX	7100	8550	7570	6070	12870	15140	15350	15070	13880	12260	10770	10820
MIN	5720	7350	6110	5510	5810	13330	14500	13940	12320	10820	9800	9640
(*)	6674.00	6686.34	6676.66	6674.03	6711.53	6720.20	6720.33	6715.94	6709.26	6702.71	6701.11	6696.90
(**)	-1410	+1880	-1510	-370	+7130	+2180	+40	-1150	-1620	-1500	-340	-840

CAL YR 1987 MAX 15300 MIN 5720 ** +420
WTR YR 1988 MAX 15350 MIN 5510 ** +2490

e Estimated
* Elevation, in feet, at end of month.
** Change in contents, in acre-feet.

09398500 CLEAR CREEK BELOW WILLOW CREEK, NEAR WINSLOW, AZ

LOCATION.--Lat 34°40'03", long 111°00'25", in SW¼SE¼ sec.19, T.15 N., R.13 E., Coconino County, Hydrologic Unit 15020008, in Apache-Sitgreaves National Forest, on right bank 2 mi downstream from Willow Creek and 30 mi southwest of Winslow.

DRAINAGE AREA.--317 mi^2, revised.

PERIOD OF RECORD.--June 1947 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,957 ft above National Geodetic Vertical Datum of 1929, from Topographic Division by photogrammetry.

REMARKS.--Records good except for estimated daily discharges, Feb. 6-16, which are fair and Dec. 13-31, Jan. 1-7, 13, 14, 19-27, which are poor. Flow is partially controlled by Blue Ridge Reservoir (usable capacity, 15,000 acre-ft) about 20 mi upstream. (See sta 09398300.) Diversion to East Verde River from Blue Ridge Reservoir. (See sta 09507580.)

AVERAGE DISCHARGE (unadjusted for diversion or storage).--41 years, 85.3 ft^3/s, 61,800 acre-ft/yr; median of yearly mean discharges, 57 ft^3/s, 41,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,700 ft^3/s Dec. 18, 1978, gage height, 22.32 ft, from rating curve extended above 6,000 ft^3/s; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	2130	*1,270	*8.97	Feb. 27	1715	1,100	8.59
Feb. 3	2045	804	7.90	Apr. 27	0800	1,110	8.61

No flow Oct. 1-31, May 31 to Aug. 28, and Sept. 14-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	257	1.5	e1.2	41	534	73	174	.00	.00	.00	113
2	.00	820	1.2	e1.2	49	375	57	124	.00	.00	.00	75
3	.00	322	1.1	e1.2	209	275	44	95	.00	.00	.00	37
4	.00	137	1.1	e1.5	623	210	36	74	.00	.00	.00	20
5	.00	81	1.3	e1.5	344	188	32	57	.00	.00	.00	12
6	.00	63	1.5	e1.5	e208	196	31	43	.00	.00	.00	7.2
7	.00	68	1.7	e1.5	e164	229	31	33	.00	.00	.00	4.2
8	.00	64	1.7	1.7	e129	234	31	27	.00	.00	.00	2.5
9	.00	49	1.5	1.8	e113	218	31	22	.00	.00	.00	1.3
10	.00	36	1.3	2.0	e114	213	29	18	.00	.00	.00	.63
11	.00	27	1.2	2.4	e118	187	26	15	.00	.00	.00	.28
12	.00	21	1.2	2.9	e110	156	21	12	.00	.00	.00	.16
13	.00	16	e1.2	e3.6	e110	124	18	9.9	.00	.00	.00	.02
14	.00	14	e1.5	e3.8	e121	101	16	8.1	.00	.00	.00	.00
15	.00	12	e1.5	4.3	e108	90	15	6.4	.00	.00	.00	.00
16	.00	10	e1.2	4.7	e107	78	25	5.2	.00	.00	.00	.00
17	.00	9.3	e1.2	5.4	122	69	72	4.4	.00	.00	.00	.00
18	.00	7.7	e1.5	5.8	97	60	80	3.7	.00	.00	.00	.00
19	.00	6.2	e1.2	e5.5	109	53	113	3.0	.00	.00	.00	.00
20	.00	5.4	e1.2	e5.0	71	51	194	2.3	.00	.00	.00	.00
21	.00	5.2	e1.2	e5.0	70	58	189	1.8	.00	.00	.00	.00
22	.00	4.3	e1.5	e5.0	69	84	174	1.5	.00	.00	.00	.00
23	.00	3.8	e1.5	e5.0	73	113	167	1.1	.00	.00	.00	.00
24	.00	3.4	e1.5	e5.5	107	138	254	.82	.00	.00	.00	.00
25	.00	3.3	e1.2	e5.0	141	156	547	.50	.00	.00	.00	.00
26	.00	2.9	e1.2	e5.5	191	161	913	.42	.00	.00	.00	.00
27	.00	2.5	e1.2	e6.0	683	165	968	.30	.00	.00	.00	.00
28	.00	2.2	e1.2	6.6	814	176	686	.21	.00	.00	.00	.00
29	.00	2.1	e1.2	9.4	598	144	447	.16	.00	.00	42	.00
30	.00	1.8	e1.5	15	---	111	275	.07	.00	.00	33	.00
31	.00	---	e1.2	24	---	89	---	.0	---	.00	23	---
TOTAL	0.00	2057.1	41.2	150.5	5813	5036	5595	743.88	0.00	0.00	98.00	273.29
MEAN	.00	68.6	1.33	4.85	200	162	186	24.0	.00	.00	3.16	9.11
MAX	.00	820	1.7	24	814	534	968	174	.00	.00	42	113
MIN	.00	1.8	1.1	1.2	41	51	15	.00	.00	.00	.00	.00
AC-FT	.0	4080	82	299	11530	9990	11100	1480	.0	.0	194	542

CAL YR 1987 TOTAL 22062.77 MEAN 60.4 MAX 931 MIN .00 AC-FT 43760
WTR YR 1988 TOTAL 19807.97 MEAN 54.1 MAX 968 MIN .00 AC-FT 39290

e Estimated

09401260 MOENKOPI WASH AT MOENKOPI, AZ

LOCATION.--Lat 36°06'18", long 111°12'04", in NW¼NE¼ sec.3, T.31 N., R.11 E. (unsurveyed), Coconino County, Hydrologic Unit 15020018, in Hopi Indian Reservation on right bank, 100 ft upstream from bridge on State Highway 264, 1.3 mi southeast of Moenkopi, 2.5 mi downstream from former gaging station 09401250, and 12.5 mi downstream from Begashibito Wash.

DRAINAGE AREA.--1,629 mi^2, revised.

PERIOD OF RECORD.--July 1976 to current year. Records for October 1973 to July 1976, at site 2.5 mi upstream, not equivalent below 1.5 ft^3/s due to channel losses.

GAGE.--Water-stage recorder and crest stage gages. Elevation of gage is 4,610 ft above National Geodetic Vertical Datum of 1929, from topographic map.

AVERAGE DISCHARGE.--12 years, 11.2 ft^3/s, 8,110 acre-ft/yr.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,100 ft^3/s Sept. 30, 1983, gage height, 15.10 ft, from rating curve extended above 220 ft^3/s on basis of step-backwater computation at gage heights 12.2 ft, 15.0 ft, and 17.8 ft; no flow at times each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 15,100 ft^3/s occurred Aug. 4, 1929, at former gaging station site 3.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1900	4,260	8.95
Aug. 27	0445	*7,280	*11.76

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	e1300	3.6	e7.0	30	e10	1.6	1.6	.12	8.4	e30	e130
2	.17	464	4.4	e8.5	20	e10	1.6	1.6	.12	1.6	e20	25
3	.17	e40	5.6	11	e40	e10	1.6	1.6	.12	1.0	e8.5	6.8
4	.12	16	5.6	16	e35	e5.0	1.6	1.6	.06	.80	e3.0	2.8
5	.12	11	3.6	14	50	2.8	1.6	1.2	.02	.80	e3.0	2.2
6	.36	162	3.6	18	35	2.2	1.6	1.0	.00	.36	e10.0	1.2
7	.27	47	2.8	14	25	1.6	1.6	1.0	.00	.12	e13	1.0
8	.27	10	2.8	14	20	2.2	1.6	1.2	.00	.00	e3.0	.60
9	.20	4.4	2.8	6.8	20	2.2	1.6	1.6	.00	.00	e.50	.60
10	.27	3.6	2.8	5.6	35	2.2	1.6	1.6	.00	.00	e.20	.60
11	.27	2.8	3.6	5.6	35	2.2	1.6	e1.6	.00	.00	.00	1.6
12	.36	2.2	5.6	5.6	e25	2.8	1.6	e1.2	.00	.00	.00	1.6
13	.80	2.2	2.2	5.6	e20	2.8	2.2	1.2	.00	.00	.00	8.4
14	2.2	2.2	2.8	5.6	e20	2.8	2.2	1.0	.00	.00	.00	10
15	1.2	2.2	2.8	3.6	e15	2.8	2.8	.60	.00	.00	.00	2.8
16	1.2	2.2	3.6	11	e10	2.8	3.6	.47	.00	.00	.00	2.2
17	1.2	2.2	3.6	16	e5.0	2.8	121	.47	.00	.00	.00	2.2
18	1.2	2.2	5.6	6.8	e20	2.8	30	.47	.00	.00	.00	1.6
19	1.2	2.2	5.6	10	20	2.8	8.4	.47	.00	.00	.00	1.6
20	1.6	2.8	6.8	e5.6	10	2.8	4.4	.47	.00	.00	.00	1.6
21	1.2	4.4	5.6	5.6	e25	2.2	5.6	.36	.00	.00	80	1.6
22	1.0	4.4	3.6	3.0	e15	2.2	6.8	.36	.00	.00	e55	1.6
23	.47	3.6	5.0	1.6	e8.0	2.2	11	.36	.00	.00	e20	1.6
24	.60	3.6	3.6	1.6	e15	2.2	11	.20	.03	.00	e75	1.6
25	1.6	2.8	2.2	1.6	e2.5	2.2	8.4	.20	7.7	.00	225	2.2
26	2.2	2.8	3.6	3.6	2.8	2.2	5.6	.20	e15	.00	130	2.2
27	2.2	3.6	e5.0	2.2	3.6	2.2	3.6	.08	e6.8	.64	1130	2.2
28	2.2	2.8	e5.0	3.8	11	1.6	2.8	.00	e35	.35	86	2.2
29	1.2	4.4	e5.0	1.6	e20	1.6	2.8	.00	e45	.00	49	1.6
30	e150	4.4	e5.0	e20	---	2.2	2.8	.00	209	e25	384	1.6
31	16	---	e6.0	e50	---	2.2	---	.06	---	26	120	---
TOTAL	192.05	2118.0	129.4	284.9	592.9	98.6	256.2	23.77	318.97	65.07	2445.20	222.80
MEAN	6.20	70.6	4.17	9.19	20.4	3.18	8.54	.77	10.6	2.10	78.9	7.43
MAX	150	1300	6.8	50	50	10	121	1.6	209	26	1130	130
MIN	.12	2.2	2.2	1.6	2.5	1.6	1.6	.00	.00	.00	.00	.60
AC-FT	381	4200	257	565	1180	196	508	47	633	129	4850	442

CAL YR 1987 TOTAL 5054.85 MEAN 13.8 MAX 1300 MIN .00 AC-FT 10030
WTR YR 1988 TOTAL 6747.86 MEAN 18.4 MAX 1300 MIN .00 AC-FT 13380

e Estimated

09402000 LITTLE COLORADO RIVER NEAR CAMERON, AZ

LOCATION.--Lat 35°55'35", long 111°34'00", in NW¼ sec.5, T.29 N., R.8 E. (unsurveyed), Coconino County, Hydrologic Unit 15020016, in Navajo Indian Reservation, on left bank 3 mi downstream from Coconino damsite, 9.5 mi downstream from Moenkopi Wash, 9.5 mi northwest of Cameron, and 45 mi upstream from mouth.

DRAINAGE AREA.--26,459 mi^2, revised, of which 368 mi^2 are noncontributing.

PERIOD OF RECORD.--June 1947 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,979.2 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above station for irrigation of about 32,000 acres. Some regulation by reservoirs above station (combined capacity of principal reservoirs, about 135,000 acre-ft).

AVERAGE DISCHARGE.--41 years, 244 ft^3/s, 176,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,900 ft^3/s Jan. 21, 1952, gage height, 20.7 ft; no flow at times in each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of about 120,000 ft^3/s occurred on Sept. 19 or 20, 1923, based on discharge at Grand Falls.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1530	*12,600	*14.74	Aug. 27	1445	5,460	9.75
Apr. 17	1030	4,300	8.73				

No flow Oct. 1-28, Dec. 14-19, Dec. 26 to Jan. 5, May 20 to June 24, July 16-30, Sept. 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	6690	e.50	.00	72	1650	76	642	e.00	178	e150	e1690
2	.00	4320	e.50	.00	427	1300	82	414	e.00	289	e50	2180
3	.00	2960	e.50	.00	846	1110	74	289	.00	e180	e5.0	2030
4	.00	3090	e.50	.00	1070	978	60	181	.00	e120	e.70	703
5	.00	2020	e.50	.00	2110	775	49	119	.00	e72	60	228
6	.00	769	e.40	46	1880	538	45	e100	.00	e46	161	98
7	.00	570	e.30	79	e1500	e440	40	e80	.00	e29	135	52
8	.00	544	e.20	14	e1250	e380	32	e70	.00	e18	160	30
9	.00	630	e.10	5.6	e1000	e310	24	e60	.00	e11	e113	20
10	.00	350	.10	78	793	e280	17	e50	.00	e7.0	369	13
11	.00	186	.10	164	e680	e230	10	e40	.00	e5.0	e157	12
12	.00	104	.10	96	e540	e200	8.1	e30	.00	e3.0	e110	7.7
13	.00	80	.10	84	e450	e170	e7.0	e20	.00	e.50	e78	4.3
14	.00	64	.00	59	e380	e140	e5.0	e10	.00	e.20	e47	159
15	.00	e50	.00	40	e310	e120	e3.0	e5.0	.00	e.10	e30	325
16	.00	e38	.00	29	e260	e105	11	e2.0	.00	e.00	e30	126
17	.00	e30	.00	25	e210	e89	1880	e1.0	.00	e.00	e30	55
18	.00	e24	.00	24	e180	e80	242	e.50	.00	e.00	e100	36
19	.00	e18	.00	18	e200	e70	1650	e.10	.00	e.00	e232	22
20	.00	e15	.70	15	e240	e60	2590	e.00	.00	e.00	e130	15
21	.00	e12	1.2	9.6	e210	e52	1270	e.00	.00	e.00	e153	9.6
22	.00	e9.0	.90	7.7	e181	e47	362	e.00	.00	e.00	e268	e7.0
23	.00	e7.0	.50	28	166	41	259	e.00	.00	e.00	e190	e5.1
24	.00	e5.0	.30	35	148	29	432	e.00	.00	e.00	e186	e4.0
25	.00	e3.0	.10	38	148	20	524	e.00	1.9	e.00	e200	e2.0
26	.00	e2.0	.00	31	138	15	392	e.00	.50	e.00	e463	e1.0
27	.00	e1.0	.00	43	128	10	642	e.00	50	e.00	2260	e.50
28	.00	e.50	.00	45	184	7.2	1440	e.00	6.3	e.00	1830	e.00
29	.10	e.30	.00	22	633	13	1440	e.00	43	e.00	1850	e.00
30	305	e.50	.00	19	---	51	1080	e.00	336	e.00	e2570	e.00
31	149	---	.00	21	---	55	---	e.00	---	e10	e3270	---
TOTAL	454.10	22592.30	7.60	1075.90	16334	9365.2	14746.1	2113.60	437.70	968.80	15387.70	7835.20
MEAN	14.6	753	.25	34.7	563	302	492	68.2	14.6	31.3	496	261
MAX	305	6690	1.2	164	2110	1650	2590	642	336	289	3270	2180
MIN	.00	.30	.00	.00	72	7.2	3.0	.00	.00	.00	.70	.00
AC-FT	901	44810	15	2130	32400	18580	29250	4190	868	1920	30520	15540

CAL YR 1987 TOTAL 87439.79 MEAN 240 MAX 6690 MIN .00 AC-FT 173400
WTR YR 1988 TOTAL 91318.20 MEAN 250 MAX 6690 MIN .00 AC-FT 181100

e Estimated

09402500 COLORADO RIVER NEAR GRAND CANYON, AZ

LOCATION.--Lat 36°06'05", long 112°05'08", in sec.5, T.31 N., R.3 E. (unsurveyed), Coconino County, Hydrologic Unit 15010001, in Grand Canyon National Park, on left bank 0.2 mi upstream from Kaibab Bridge, 0.4 mi upstream from Bright Angel Creek, 4.5 mi northeast of village of Grand Canyon, 26 mi downstream from Little Colorado River, and 267 mi upstream from Hoover Dam.

DRAINAGE AREA.--141,600 mi^2 approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1922 to current year. Prior to 1944, published as "Colorado River at Bright Angel Creek, near Grand Canyon." Gage-height records collected 1.5 mi downstream 1908-13, published in reports of U.S. Weather Bureau.

GAGE.--Water-stage recorder with supplementary water-stage recorder on right bank 700 ft downstream (prior to Oct. 1, 1934, supplementary gage was the only gage). Datum of both gages is 2,418.7 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records excellent. Flow completely regulated by Lake Powell, 104 mi upstream, since Mar. 13, 1963. (See elsewhere in this report.) Many diversions above station for irrigation, municipal, and industrial uses.

AVERAGE DISCHARGE (unadjusted for storage in Lake Powell).--40 years (water years 1923-62), 16,930 ft^3/s, 12,260,000 acre-ft/yr; 24 years (water years 1965-88) 15,130 ft^3/s, 10,962,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1922-62: Maximum discharge, 127,000 ft^3/s July 2, 1927, gage height, 29.25 ft; minimum, 700 ft^3/s Dec. 28, 1924, gage height, -0.70 ft.
1963-88: Maximum discharge, 96,200 ft^3/s June 29, 1983, gage height, 26.26 ft; minimum, 850 ft^3/s Jan. 26, 1963, gage height, -0.55 ft, result of closing coffer dam at Glen Canyon Dam.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1884, 300,000 ft^3/s about July 8, 1884 (computed on basis of flood studies at Lees Ferry). Crest discharge of flood of June 19, 1921, was 220,000 ft^3/s, gage height, 37.5 ft from floodmarks, from rating curve extended above 120,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,500 ft^3/s July 29, gage height, 13.16 ft; minimum daily, 5,690 ft^3/s Oct. 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13500	8700	12800	11400	9150	13000	13500	8980	6700	10700	10900	15700
2	12400	10200	14800	13600	14900	16100	11700	8020	9080	9720	13800	15000
3	10800	12700	17200	14000	17300	11800	8890	9650	9040	8160	15800	14800
4	11100	12500	17300	12100	16400	11800	11000	9020	8460	7630	15000	11500
5	7320	13000	17100	17600	16700	14800	12400	9000	7290	7500	13700	9910
6	12000	11200	13600	15800	15300	12400	12000	8330	6410	11300	14200	9010
7	10100	11300	11800	13900	13400	7430	10900	8130	8290	13100	11000	11900
8	10400	12000	14200	10600	10600	11900	10300	8490	8900	16000	11100	12600
9	8710	9870	15900	11600	17600	13700	11300	8070	10300	14600	10200	11600
10	8170	14900	13900	10200	16000	12200	8740	10000	10000	8810	13300	11800
11	8210	15200	14400	11400	13800	11500	8740	9340	10300	8690	15000	9630
12	6360	14700	13800	12000	13600	15000	10100	12200	6810	12400	13300	7070
13	11000	14400	13100	12400	10900	13500	10400	10400	6960	12200	14000	11700
14	11700	14500	15300	14500	14200	12400	10700	11700	10100	12100	11000	11200
15	13100	12900	15100	14500	9580	13500	11000	9030	9680	13100	9870	12300
16	11800	12500	17700	14000	16600	12600	11300	10100	8670	13300	14200	12800
17	10400	13400	16800	11500	17100	11900	9060	11400	9910	8480	15000	11400
18	6760	15300	16200	10600	17300	15600	10200	9530	10100	9660	13700	9140
19	5910	14300	16500	18200	16200	10900	11800	9770	6910	10200	13600	8540
20	11300	12500	10500	17400	15500	6100	14800	8560	7890	11700	14700	12700
21	10800	14500	8300	15800	14400	6540	13200	8730	10500	12600	8950	12200
22	8670	13500	11300	17200	13500	13600	10300	8570	10100	12700	7340	12800
23	8680	14600	11800	17700	14700	11600	8250	9440	11700	12600	13700	13100
24	6610	20100	12900	14700	15600	11700	8550	11400	12400	9980	12800	15100
25	6560	18300	11800	14800	17000	13300	6830	11100	11800	10900	13400	10200
26	5690	14400	9660	17200	17300	9880	8540	11900	8060	14200	14800	9850
27	6910	9570	12700	15000	14700	8410	8720	12400	7340	14400	14600	16500
28	6200	13600	9900	17300	9810	7880	8720	11300	10500	14500	12800	17400
29	7330	12100	9540	14700	7080	13100	11400	6770	10100	18000	9580	12500
30	8100	9790	11900	12100	---	13000	10400	6330	10200	16900	14700	12500
31	6820	---	13000	9730	---	11500	---	6140	---	12400	16000	---
TOTAL	283410	396530	420800	433530	417220	368640	314340	293800	274500	368530	405040	362450
MEAN	9142	13220	13570	13980	14390	11890	10480	9477	9150	11890	13070	12080
MAX	13500	20100	17700	18200	17600	16100	14800	12400	12400	18000	16000	17400
MIN	5690	8700	8300	9730	7080	6100	6830	6140	6410	7500	7340	7070
AC-FT	562100	786500	834700	859900	827600	731200	623500	582800	544500	731000	803400	718900

CAL YR 1987 TOTAL 6000180 MEAN 16440 MAX 29100 MIN 5690 AC-FT 11900000
WTR YR 1988 TOTAL 4338790 MEAN 11350 MAX 20100 MIN 5690 AC-FT 8606000

09402500 COLORADO RIVER NEAR GRAND CANYON, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1925 to November 1942, September 1943 to December 1987 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to March 1974, April 1983 to December 1987 (discontinued).
WATER TEMPERATURES: October 1940 to October 1942, September 1943 to September 1976, April 1983 to December 1987 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: October 1925 to November 1942, September 1943 to September 1972.

INSTRUMENTATION.--Water-temperature recorder from October 1952 to September 1976. Specific conductance and water temperature recorder April 1983 to December 1987.

REMARKS.--Unpublished chemical analyses for period October 1930 to September 1940, daily specific conductance measurements for period October 1937 to November 1942, September 1943 to September 1964, and daily water temperatures for period October 1936 to September 1940, available from district office in Tucson, Ariz.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE (April 1983 to December 1987): Maximum recorded, 1,440 microsiemens on Mar. 20, 1986; minimum recorded, 631 microsiemens Dec. 22, 1986.
WATER TEMPERATURE (April 1983 to December 1987): Maximum recorded, 16.0°C on Aug. 26, 1984; minimum recorded, 7.5°C on Mar. 5, 1985.

EXTREMES FOR PERIOD OCTOBER-DECEMBER.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,060 microsiemens on Nov. 3; minimum recorded, 635 microsiemens on Nov. 2.
WATER TEMPERATURE: Maximum recorded, 12.9°C on Nov. 2, 3; minimum recorded, 7.8°C on Nov. 30.

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	771	729	750	---	---	---	782	729	751	---	---	---
2	759	729	746	1050	635	730	759	706	731	---	---	---
3	794	741	764	1060	782	910	753	706	720	---	---	---
4	794	741	758	829	759	796	741	712	726	---	---	---
5	---	---	---	794	747	765	753	718	730	---	---	---
6	829	735	782	829	741	777	776	724	740	---	---	---
7	---	---	757	806	753	768	765	729	746	---	---	---
8	---	---	764	912	747	807	---	---	---	---	---	---
9	---	---	---	---	---	813	---	---	---	---	---	---
10	---	---	---	829	724	764	---	---	---	---	---	---
11	---	---	---	759	718	733	---	---	---	---	---	---
12	---	---	---	765	724	737	---	---	---	---	---	---
13	---	---	---	765	712	734	---	---	---	---	---	---
14	794	729	750	776	712	739	---	---	---	---	---	---
15	782	718	737	771	696	735	---	---	---	---	---	---
16	794	724	744	771	724	741	---	---	---	---	---	---
17	788	724	749	753	724	738	---	---	---	---	---	---
18	---	---	---	776	705	736	---	---	---	---	---	---
19	---	---	---	741	718	727	---	---	---	---	---	---
20	---	---	---	759	729	744	---	---	---	---	---	---
21	776	712	740	759	724	737	---	---	---	---	---	---
22	---	---	---	753	724	740	---	---	---	---	---	---
23	---	---	---	759	724	738	---	---	---	---	---	---
24	---	---	---	741	700	714	---	---	---	---	---	---
25	---	---	---	718	700	710	---	---	---	---	---	---
26	---	---	---	741	712	728	---	---	---	---	---	---
27	---	---	---	788	729	761	---	---	---	---	---	---
28	---	---	---	782	712	752	---	---	---	---	---	---
29	---	---	---	753	712	736	---	---	---	---	---	---
30	---	---	---	788	729	755	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

09402500 COLORADO RIVER NEAR GRAND CANYON, AZ--Continued

WATER TEMPERATURE, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.6	10.8	11.1	---	---	---	9.4	8.6	8.9	---	---	---
2	11.8	10.8	11.2	12.9	12.2	12.5	9.4	8.6	9.0	---	---	---
3	11.8	11.0	11.4	12.9	11.4	11.9	9.6	8.8	9.1	---	---	---
4	11.8	11.2	11.5	11.8	11.0	11.4	9.4	8.8	9.1	---	---	---
5	---	---	---	11.8	11.0	11.3	9.6	9.0	9.3	---	---	---
6	12.2	11.2	11.5	11.0	10.2	10.6	9.8	9.0	9.3	---	---	---
7	---	---	11.5	10.6	10.0	10.4	9.6	9.0	9.3	---	---	---
8	---	---	---	10.6	10.2	10.4	---	---	---	---	---	---
9	---	---	---	---	---	10.5	---	---	---	---	---	---
10	---	---	---	10.4	9.4	10.0	---	---	---	---	---	---
11	---	---	---	10.2	9.4	9.8	---	---	---	---	---	---
12	---	---	---	10.2	9.4	9.9	---	---	---	---	---	---
13	---	---	---	10.0	9.4	9.8	---	---	---	---	---	---
14	12.0	10.8	11.4	10.0	9.6	9.7	---	---	---	---	---	---
15	11.2	10.6	10.9	9.6	8.8	9.3	---	---	---	---	---	---
16	11.4	10.4	10.8	9.4	8.6	9.0	---	---	---	---	---	---
17	11.2	10.6	10.9	9.2	8.4	8.8	---	---	---	---	---	---
18	---	---	---	9.4	8.6	8.9	---	---	---	---	---	---
19	---	---	---	9.6	8.8	9.1	---	---	---	---	---	---
20	---	---	---	9.4	8.6	9.0	---	---	---	---	---	---
21	11.2	10.4	10.8	9.4	8.4	9.0	---	---	---	---	---	---
22	---	---	---	9.4	8.8	9.1	---	---	---	---	---	---
23	---	---	---	9.6	8.8	9.2	---	---	---	---	---	---
24	---	---	---	9.6	9.0	9.3	---	---	---	---	---	---
25	---	---	---	9.8	8.8	9.2	---	---	---	---	---	---
26	---	---	---	9.4	8.6	9.0	---	---	---	---	---	---
27	---	---	---	9.2	8.4	8.8	---	---	---	---	---	---
28	---	---	---	9.2	8.4	8.9	---	---	---	---	---	---
29	---	---	---	9.4	8.6	8.9	---	---	---	---	---	---
30	---	---	---	9.4	7.8	8.8	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

09403600 KANAB CREEK NEAR KANAB, UT

LOCATION.--Lat 37°06'02", long 112°32'50", in NE¼NE¼SW¼ sec. 5, T. 43 S., R. 6 W., Kane County, Hydrologic Unit 15010003, at upstream edge of left bridge pier on U.S. Highway 89, 300 ft upstream from Tiny Canyon and 3.5 mi north of Kanab.

DRAINAGE AREA.--198 mi^2.

PERIOD OF RECORD.--July 1959 to September 1968 (peaks only). January 1979 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,060 ft from topographic map. A crest-stage gage was in operation at this site from July 22, 1959 to Sept. 30, 1968 at different datum.

REMARKS.--Records poor. No diversion above station for irrigation.

AVERAGE DISCHARGE.--9 years, 15.7 ft^3/s, 11,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,130 ft^3/s Aug. 20, 1984, maximum gage height, 8.50 ft Aug. 20, 1984; minimum recorded, 0.90 ft^3/s June 23, 26, 29, 1983.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge recorded by crest-stage gage, 3,030 ft^3/s Sept. 8, 1961, gage height, 19.80 ft at different datum.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 1	0230	*511	*8.34

Minimum daily discharge, 4.3 ft^3/s Mar. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e8.4	13	e20	e16	e15	e11	e5.0	e14	e11	e5.1	e18	e7.2
2	e8.2	12	e19	e16	e15	e10	5.9	e14	e11	e5.4	e15	e7.0
3	7.9	15	e18	16	e16	e9.6	e6.7	e14	e10	e5.6	e18	e7.0
4	e8.2	9.2	e17	17	e16	e10	7.2	e14	e10	e6.0	e11	e7.0
5	8.4	e11	e17	e17	e16	e11	e7.0	14	e9.6	e6.3	e9.0	e7.0
6	9.1	18	e16	17	e16	e12	e6.8	e14	e9.4	e6.4	e12	e7.0
7	e9.2	15	16	e16	16	e11	6.7	e15	e9.2	6.5	e8.0	e7.0
8	e10	e15	e15	e16	15	e10	e8.8	e15	e9.0	7.0	6.7	e7.0
9	e12	e15	e15	e16	17	e9.7	10	e15	e8.8	6.2	e6.2	e7.0
10	14	e15	e14	16	13	e9.0	11	16	8.8	6.7	e6.6	e7.0
11	e15	15	e13	e16	14	e8.4	10	14	9.5	7.3	6.8	7.0
12	e14	e14	e12	e16	14	e8.6	e10	e12	8.1	7.3	e8.0	8.1
13	e12	e14	e11	e16	14	e9.0	e10	e12	e7.4	6.5	9.2	7.2
14	e11	e14	e10	e17	13	e9.7	e10	13	6.5	6.7	8.6	7.5
15	9.5	13	e10	e17	12	e10	e11	e13	e6.4	6.6	e8.7	e7.5
16	e9.7	e13	e10	18	14	e11	e11	e13	e5.3	7.2	e9.0	e7.3
17	e9.8	e14	e10	e18	12	e12	e12	e12	e6.2	6.6	e9.0	7.1
18	e10	e14	11	e18	14	e12	e13	e12	e6.1	7.2	e9.0	7.7
19	e10	e14	11	e18	14	e13	e14	e11	e5.9	7.0	8.8	7.1
20	e11	e15	11	e17	15	e13	e16	e11	e5.8	6.7	8.4	6.6
21	11	e15	12	e17	14	e14	19	e11	e5.7	7.2	e8.6	6.8
22	e11	e15	12	e17	12	e14	19	12	e5.6	6.7	e9.0	7.4
23	e11	16	14	17	12	e12	21	12	e5.4	6.5	e9.4	7.3
24	e11	16	15	16	11	e10	21	15	e5.5	5.9	9.8	8.5
25	e11	16	e15	e16	12	e8.0	e18	e13	e5.3	6.1	12	7.8
26	11	e16	e15	e15	13	e5.8	13	e12	4.9	7.2	e13	7.7
27	11	e19	e16	15	12	5.2	e15	e11	e4.8	7.3	e13	e7.8
28	e11	e22	e16	14	e12	5.4	15	e13	4.8	8.6	e13	e7.9
29	e11	e22	e16	e14	e11	e4.8	e14	e13	4.4	8.0	e13	e8.0
30	12	e21	e16	15	---	4.3	e14	e12	e4.8	4.7	e8.0	e8.0
31	12	---	e16	e15	---	6.6	---	e12	---	5.7	e7.4	---
TOTAL	330.4	456.2	439	505	400	300.1	361.1	404	216.3	204.2	312.2	220.5
MEAN	10.7	15.2	14.2	16.3	13.8	9.68	12.0	13.0	7.21	6.59	10.1	7.35
MAX	15	22	20	18	17	14	21	16	11	8.6	18	8.5
MIN	7.9	9.2	10	14	11	4.3	5.0	11	4.4	4.7	6.2	6.6
AC-FT	655	905	871	1000	793	595	716	801	429	405	619	437

CAL YR 1987 TOTAL 4150.3 MEAN 11.4 MAX 22 MIN 5.2 AC-FT 8230
WTR YR 1988 TOTAL 4149.0 MEAN 11.3 MAX 22 MIN 4.3 AC-FT 8230

e Estimated

VIRGIN RIVER BASIN

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 36°53'30", long 113°55'25", in SW¼SW¼ sec.4, T.40 N., R.15 W., Mohave County, Hydrologic Unit 15010010, on right bank 0.5 mi downstream from Beaver Dam Wash, 0.4 mi upstream from Littlefield, and 36 mi upstream from waterline of Lake Mead at elevation 1,221 ft, National Geodetic Vertical Datum of 1929.

DRAINAGE AREA.--5,090 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to current year.

REVISED RECORDS.--WSP 959: 1932. WSP 979: 1930-31, 1933-37. WSP 1313: 1940 (M).

GAGE.--Water-stage recorder. Datum of gage is 1,763.68 ft, above National Geodetic Vertical Datum of 1929. Prior to May 28, 1933, nonrecording gage at site 300 ft upstream, and May 28, 1933, to Nov. 7, 1939, at same site, both at datum 2.53 ft higher. Nov. 8, 1939, to Mar. 31, 1942, nonrecording gage at same site at datum 2.00 ft higher. Apr. 1, 1942, to Sept. 30, 1970, water-stage recorder at same site at same datum. Oct. 1, 1970, to Aug. 7, 1979, at site 300 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--59 years, 242 ft^3/s, 175,300 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,200 ft^3/s, Dec. 6, 1966, gage height, 15.66 ft, for site then in use, from rating curve extended above 1,500 ft^3/s on basis of slope-area measurement of peak flow; minimum, 38 ft^3/s, May 1, 10, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 6	1030	6,560	9.80
Aug. 3	1700	*8,280	*10.35

Minimum daily, 57 ft^3/s, July 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	248	206	218	253	281	208	631	245	126	797	251
2	90	308	193	225	257	304	198	563	211	112	247	246
3	79	543	189	227	282	283	181	474	187	82	2860	240
4	83	432	191	228	284	250	175	469	162	79	1040	235
5	73	212	246	242	280	242	174	431	144	78	411	226
6	97	1870	257	252	284	247	164	406	136	85	256	229
7	106	1380	247	247	282	250	168	373	115	91	384	230
8	101	438	208	238	287	230	e170	343	111	75	185	222
9	102	314	195	236	280	216	e160	328	108	72	122	238
10	100	261	184	234	277	223	e150	288	121	67	139	242
11	121	233	187	235	241	231	e138	297	144	67	169	227
12	114	219	180	237	242	231	e130	381	91	66	179	138
13	192	210	179	237	242	227	e140	418	101	67	184	110
14	264	218	175	234	233	231	e160	458	93	63	168	107
15	230	279	219	248	247	219	e205	546	92	60	150	99
16	209	210	217	255	228	225	e400	455	85	71	146	139
17	192	209	176	243	232	225	e560	574	80	82	144	164
18	199	233	179	302	228	216	e720	684	69	84	138	173
19	209	241	181	277	234	269	638	618	65	93	153	188
20	216	238	170	275	230	268	557	502	97	78	150	171
21	202	232	161	259	223	215	1580	396	253	57	141	192
22	223	236	163	240	218	211	1820	348	268	57	161	198
23	241	245	164	238	219	202	1090	330	337	61	132	199
24	458	246	161	240	218	198	1040	292	210	62	108	184
25	313	235	229	257	219	195	818	267	215	59	107	186
26	216	233	252	245	231	195	846	244	195	57	144	190
27	186	222	231	240	233	214	877	233	177	64	322	149
28	180	225	208	242	295	227	852	237	152	107	501	140
29	199	221	228	254	291	246	773	215	140	173	247	128
30	264	223	212	261	---	240	666	346	107	89	307	139
31	209	---	209	257	---	223	---	306	---	222	279	---
TOTAL	5561	10614	6197	7623	7270	7234	15758	12453	4511	2606	10471	5580
MEAN	179	354	200	246	251	233	525	402	150	84.1	338	186
MAX	458	1870	257	302	295	304	1820	684	337	222	2860	251
MIN	73	209	161	218	218	195	130	215	65	57	107	99
AC-FT	11030	21050	12290	15120	14420	14350	31260	24700	8950	5170	20770	11070

CAL YR 1987 TOTAL 67340 MEAN 184 MAX 1960 MIN 57 AC-FT 133600
WTR YR 1988 TOTAL 95878 MEAN 262 MAX 2860 MIN 57 AC-FT 190200

e Estimated.

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1947 to current year.
CHEMICAL ANALYSES: July 1949 to September 1969, once daily (composited); October 1969 to September 1987, monthly; October 1987 to current year, every two months.
SPECIFIC CONDUCTANCES AND WATER TEMPERATURES: October 1947 to March 1988, once daily; April to September 1988, every two months.
BIOLOGICAL DATA: October 1977 to September 1979, twice yearly; discontinued.
MICROBIOLOGICAL DATA: November 1977 to October 1979, monthly; October 1986 to current year, every two months.
SEDIMENT DATA: October 1947 to September 1968, once daily; September 1977 to November 1979 and October 1986 to September 1987, monthly; October 1987 to current year, every two months.

REMARKS.--Streamflow is not completely homogenous chemically from bank to bank. Flow adjacent to north (right) bank is generally somewhat more dilute than average, particularly at times of low streamflow; monthly data collected during June 1975-September 1976 indicate that specific conductance off north bank was 93 to 100 percent of streamwide average (range of discharge, 60-230 ft^3/s. This doubtless affects specific conductance of daily samples, which are collected off north bank. Water temperature characteristically shows little or no variation from bank to bank. Much of day-to-day fluctuation in water temperature prior to August 1975 was due to measurement at different times of day (rather than at about the same time each day). Detailed sampling information for period since June 1975 is available from U.S. Geological Survey, Carson City, Nev.

EXTREMES MEASURED FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCES: Maximum, 4,650 microsiemens Aug. 21, 1966; minimum, 615 microsiemens May 27, 28, 30, 31, 1983.
FECAL STREPTOCOCCI: Maximum, 46,000 colonies/100 mL (non-ideal colony count) Jan. 25, 1978; minimum, 87 colonies/100 mL Aug. 25, 1988.
WATER TEMPERATURES: Maximum, 33.5°C July 7, 1953; minimum, 2.0°C Jan. 4, 1949, Jan. 4, 1950, Jan. 4, 5, 1971.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 247,000 mg/L Aug. 14, 1964; minimum, 40 mg/L June 16, 20, 1962.

EXTREMES FOR CURRENT YEAR (MEASUREMENTS AT LEAST ONCE DAILY).--
SPECIFIC CONDUCTANCES: Presumably not measured (see PERIOD OF RECORD).
WATER TEMPERATURES: Maximum, presumably not measured (see PERIOD OF RECORD); minimum, 6.0°C Jan. 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
NOV												
19...	1430	248	2600	7.80	14.0	12.0	70	9.8	96	2100	1200	800
JAN												
28...	1500	248	2440	8.00	19.0	12.0	32	11.1	104	K30	970	800
MAR												
30...	1320	223	2560	8.10	16.5	16.5	68	8.8	97	490	850	820
MAY												
25...	1500	271	2220	8.20	33.0	25.5	60	7.3	97	200	150	710
JUL												
27...	1300	57	3070	7.90	36.0	28.0	2.1	9.2	119	K23	690	1400
AUG												
25...	1230	111	3450	7.80	37.0	30.0	12	7.2	103	K53	87	1400
SEP												
21...	1330	170	2820	7.80	23.0	22.5	35	8.2	102	--	410	960

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY CARBON-ATE IT-FLD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
NOV												
19...	210	67	230	4	18	314	257	650	340	0.90	19	1790
JAN												
28...	210	68	210	3	13	323	265	670	320	0.60	17	1690
MAR												
30...	220	65	220	3	13	295	242	660	260	0.60	17	1750
MAY												
25...	190	57	190	3	11	274	224	590	250	0.50	16	1490
JUL												
27...	360	110	270	3	20	365	299	1200	370	0.90	20	2500
AUG												
25...	370	120	320	4	30	345	283	1100	420	0.90	21	2550
SEP												
21...	260	75	260	4	24	312	256	900	340	0.70	18	2130

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
NOV												
19...	1700	2.43	0.640	0.020	0.660	0.230	0.260	0.77	1.0	0.170	0.110	0.090
JAN												
28...	1670	2.30	0.750	0.040	0.790	0.160	0.160	0.34	0.50	0.150	0.110	0.090
MAR												
30...	1620	2.38	0.740	0.040	0.780	0.160	0.100	0.74	0.90	0.240	0.140	0.120
MAY												
25...	1450	2.03	0.500	0.020	0.520	0.040	0.060	0.66	0.70	0.070	0.070	0.050
JUL												
27...	2490	3.40	--	<0.010	0.280	0.110	0.110	0.29	0.40	0.010	0.010	0.010
AUG												
25...	2550	3.47	0.640	0.020	0.660	0.070	<0.080	0.33	0.40	0.060	0.020	0.020
SEP												
21...	2010	2.90	0.680	0.030	0.710	0.070	0.070	0.23	0.30	0.080	0.080	0.070

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, DISSOLVED (UG/L AS BE)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)
NOV 19...	10	8	100	<10	<1	2	2	2	<10	<5	280	10
JAN 28...	--	--	--	--	--	--	--	--	--	--	--	--
MAR 30...	<10	10	100	<10	<1	1	<1	3	20	<5	290	10
MAY 25...	10	7	<100	<10	<1	1	<1	4	10	<5	230	10
JUL 27...	--	--	--	--	--	--	--	--	--	--	--	--
AUG 25...	20	8	<100	<10	1	1	<1	4	20	<5	440	20
SEP 21...	10	9	<100	<10	<1	2	<1	3	20	<5	360	20

DATE	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	STRONTIUM, DISSOLVED (UG/L AS SR)	VANADIUM, DISSOLVED (UG/L AS V)	ZINC, DISSOLVED (UG/L AS ZN)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 19...	<0.1	3	1	1	<1.0	2900	3	10	788	528	35
JAN 28...	--	--	--	--	--	--	--	--	876	587	21
MAR 30...	0.1	16	5	<1	<1.0	2800	4	<10	1100	662	29
MAY 25...	<0.1	2	5	1	1.0	2500	4	20	806	590	41
JUL 27...	--	--	--	--	--	--	--	--	42	6.5	55
AUG 25...	--	--	1	2	<1.0	2500	7	20	96	29	42
SEP 21...	0.1	3	1	1	1.0	3400	5	10	427	196	51

< Actual value is known to be less than value shown.

09415000 VIRGIN RIVER AT LITTLEFIELD, AZ--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25'C, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3300	2270	2810	2500	2400	2010	---	---	---	---	---	---
2	3330	1720	3070	2430	2370	2010	---	---	---	---	---	---
3	3300	1720	2980	2490	2140	2090	---	---	---	---	---	---
4	3430	1690	2980	2520	2150	2260	---	---	---	---	---	---
5	3330	1950	2680	2440	2220	2380	---	---	---	---	---	---
6	3430	2280	2460	2490	2260	2400	---	---	---	---	---	---
7	3360	1590	2280	2360	2200	2370	---	---	---	---	---	---
8	3450	2080	3080	2350	2170	2380	---	---	---	---	---	---
9	3490	2440	3120	2470	2240	2400	---	---	---	---	---	---
10	3450	2660	3060	2460	2220	2480	---	---	---	---	---	---
11	3360	2720	3000	2460	2390	2320	---	---	---	---	---	---
12	3280	2760	3190	2410	2360	2380	---	---	---	---	---	---
13	3380	2690	3130	2450	2380	2440	---	---	---	---	---	---
14	3470	2990	3040	2410	2360	2440	---	---	---	---	---	---
15	3110	2220	2890	2410	2360	---	---	---	---	---	---	---
16	3270	2880	2750	2480	2400	2530	---	---	---	---	---	---
17	3340	2760	2870	2530	2360	---	---	---	---	---	---	---
18	3360	2570	3120	2290	2350	---	---	---	---	---	---	---
19	3360	2480	3050	2400	2350	2100	---	---	---	---	---	---
20	3370	2490	3040	2460	2390	2280	---	---	---	---	---	---
21	3360	2560	3040	2460	2420	2640	---	---	---	---	---	---
22	3340	2530	2980	2460	2410	2630	---	---	---	---	---	---
23	3190	2470	3130	2550	2390	2860	---	---	---	---	---	---
24	2530	2550	2540	2530	2430	2760	---	---	---	---	---	---
25	2540	2650	2560	2570	2460	2730	---	---	---	---	---	---
26	2610	2700	2540	2470	2480	2750	---	---	---	---	---	---
27	2990	2790	2580	2570	---	2670	---	---	---	---	---	---
28	3190	2810	2500	2360	---	2490	---	---	---	---	---	---
29	3190	2770	2780	2430	1860	2140	---	---	---	---	---	---
30	3040	2750	2630	2380	---	2360	---	---	---	---	---	---
31	2490	---	2640	2350	---	2500	---	---	---	---	---	---
MEAN	3210	2450	2860	2450	2320	2420	--	---	---	---	---	---
MAX	3490	2990	3190	2570	2480	2860	---	---	---	---	---	---
MIN	2490	1590	2280	2290	1860	2010	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24.0	17.0	11.0	8.0	10.0	---	---	---	---	---	---	---
2	24.0	16.0	12.0	7.0	12.0	16.0	---	---	---	---	---	---
3	25.0	16.0	12.0	7.0	11.0	15.0	---	---	---	---	---	---
4	25.0	17.0	13.0	9.0	10.0	16.0	---	---	---	---	---	---
5	24.0	16.0	13.0	10.0	10.0	16.0	---	---	---	---	---	---
6	24.0	13.0	13.0	11.0	10.0	17.0	---	---	---	---	---	---
7	23.0	14.0	12.0	11.0	10.5	17.0	---	---	---	---	---	---
8	23.0	14.0	13.0	11.0	11.0	15.0	---	---	---	---	---	---
9	23.0	15.0	14.0	11.0	13.0	14.0	---	---	---	---	---	---
10	24.0	16.0	14.0	10.0	13.0	12.0	---	---	---	---	---	---
11	23.5	15.0	14.0	11.0	13.0	12.0	---	---	---	---	---	---
12	22.0	15.0	9.0	9.0	13.0	12.0	---	---	---	---	---	---
13	22.0	15.0	8.0	9.0	13.0	15.0	---	---	---	---	---	---
14	21.0	15.0	9.0	9.0	13.0	13.0	---	---	---	---	---	---
15	19.0	11.0	8.0	9.0	12.0	---	---	---	---	---	---	---
16	20.0	14.0	9.0	10.0	12.0	14.0	---	---	---	---	---	---
17	19.0	14.0	12.0	10.0	12.0	---	---	---	---	---	---	---
18	19.0	11.0	12.0	10.0	10.0	---	---	---	---	---	---	---
19	19.0	11.0	12.0	6.0	12.0	14.0	---	---	---	---	---	---
20	19.5	13.0	11.0	8.0	13.0	11.0	---	---	---	---	---	---
21	19.5	12.0	12.0	8.0	14.0	18.0	---	---	---	---	---	---
22	19.0	13.0	12.0	9.0	14.0	18.0	---	---	---	---	---	---
23	20.0	12.0	12.0	10.0	15.0	18.0	---	---	---	---	---	---
24	18.0	12.0	9.0	9.0	15.0	17.0	---	---	---	---	---	---
25	17.0	12.0	7.0	9.0	16.0	20.0	---	---	---	---	---	---
26	17.0	12.0	7.0	10.0	15.0	20.0	---	---	---	---	---	---
27	17.0	12.0	7.0	11.0	---	18.0	---	---	---	---	---	---
28	22.0	11.0	8.0	12.0	---	14.0	---	---	---	---	---	---
29	20.0	11.0	9.0	13.0	16.0	15.0	---	---	---	---	---	---
30	18.0	11.0	11.0	13.0	---	15.0	---	---	---	---	---	---
31	17.0	---	8.0	12.0	---	15.0	---	---	---	---	---	---
MEAN	20.9	13.5	10.7	9.7	12.5	15.5	---	---	---	---	---	---
MAX	25.0	17.0	14.0	13.0	16.0	20.0	---	---	---	---	---	---
MIN	17.0	11.0	7.0	6.0	10.0	11.0	---	---	---	---	---	---

09419700 LAS VEGAS WASH NEAR HENDERSON, NV

LOCATION.--Lat 36°05'20", long 114°59'05", in SE¼SW¼ sec.30, T.21 S., R.63 E., Clark County, Hydrologic Unit 15010015, on right bank at upstream end of 4.5-ft pipe culvert on road, 3.5 mi north of Henderson, and 6.0 mi upstream from high-water line of Lake Mead at elevation 1,221.4 ft, National Geodetic Vertical Datum of 1929.

DRAINAGE AREA.--2,125 mi^2, of which 1,518 mi^2 contribute directly to surface runoff. Prior to Apr. 4, 1961, 2,179 mi^2, of which 1,571 mi^2 contributed directly to surface runoff.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1957 to September 1983, October 1984 to current year.

REVISED RECORDS.--WSP 1926: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,540 ft, from topographic map. Prior to Apr. 4, 1961, at site 2.5 mi downstream at various datums.

REMARKS.--Records fair except for estimated daily discharges, which are poor. In closed basin above station, 2,150 acres are irrigated, mostly by pumping from ground water. Discharge includes wastewater from industrial plants and sewage effluent.

AVERAGE DISCHARGE.--30 years (1958-83, 1985-88), 57.6 ft^3/s, 41,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,510 ft^3/s, July 4, 1975, gage height, 10.67 ft, from floodmarks, from rating curve extended above 3,340 ft^3/s on basis of area-velocity computation to determine peak flow, maximum gage height, 12.72 ft, Dec. 27, 1984; minimum daily, 4.8 ft^3/s, Aug. 17, 1960.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 10, 1984, reached a stage of 17.14 ft, present datum, from floodmarks; discharge, 1,380 ft^3/s, by sum of slope-conveyance and culvert computations.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,400 ft^3/s, Nov. 2, gage height, 17.64 ft, from slope-conveyance estimate; minimum daily, 120 ft^3/s, Apr. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	e285	e130	e134	147	147	152	138	141	134	154	145
2	138	e250	e130	e132	170	144	150	141	127	134	143	146
3	139	e265	e133	e132	164	144	150	140	133	135	144	146
4	139	e205	e137	e133	146	144	151	139	132	134	144	145
5	135	e220	e195	e133	143	145	153	129	135	134	144	145
6	125	e200	e138	e134	142	145	148	127	138	137	145	147
7	125	e175	e139	e135	142	144	144	129	138	136	132	147
8	132	e150	e138	e136	143	145	142	130	138	133	133	148
9	133	e150	e138	e134	143	145	142	133	139	127	133	146
10	131	e150	e138	e132	146	146	147	139	136	129	136	145
11	132	e150	e138	e134	145	148	140	138	136	132	137	146
12	132	e152	e137	e136	146	146	e120	138	136	141	139	145
13	128	e163	e137	e137	146	144	138	138	137	137	143	142
14	128	e160	e137	e139	145	141	239	139	133	143	143	143
15	131	e150	134	e140	146	138	186	140	138	142	144	143
16	134	e148	133	e141	148	138	158	141	131	143	143	143
17	136	e148	e134	e142	145	136	132	140	132	143	142	144
18	137	e148	e136	e143	146	139	135	139	132	146	146	145
19	135	e148	e135	e143	146	144	141	138	133	146	146	148
20	135	e148	e134	e146	147	150	139	140	137	141	146	147
21	137	e148	e133	149	146	149	172	138	139	140	147	146
22	137	e148	e132	143	146	148	158	137	143	139	148	146
23	138	e142	e132	144	146	142	148	137	140	138	147	146
24	170	e130	e132	143	146	144	142	135	140	138	146	145
25	e260	146	e132	142	146	147	145	132	139	141	145	142
26	e163	148	e131	143	146	147	143	132	139	140	143	140
27	e140	145	e131	143	150	147	140	135	139	142	185	136
28	e140	148	e132	145	164	145	134	134	136	142	155	136
29	e140	142	e133	144	149	146	138	131	137	142	153	135
30	e140	e132	e135	147	---	147	138	127	137	141	196	135
31	e150	---	e135	147	---	148	---	130	---	143	150	---
TOTAL	4379	4994	4229	4326	4285	4483	4465	4204	4091	4293	4552	4314
MEAN	141	166	136	140	148	145	149	136	136	138	147	144
MAX	260	285	195	149	170	150	239	141	143	146	196	148
MIN	125	130	130	132	142	136	120	127	127	127	132	135
AC-FT	8690	9910	8390	8580	8500	8890	8860	8340	8110	8520	9030	8560

CAL YR	1987	TOTAL	50414	MEAN	138	MAX	285	MIN	114	AC-FT	100000
WTR YR	1988	TOTAL	52615	MEAN	144	MAX	285	MIN	120	AC-FT	104400

e Estimated.

09419700 LAS VEGAS WASH NEAR HENDERSON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1957 to October 1961. September and October 1962, May 1963 to June 1965, and December 1965 to current year.

CHEMICAL ANALYSES: January 1964 to January 1965, twice monthly; October 1967 to January 1969, weekly; February 1969 to January 1970 and July 1970 to September 1985, monthly; May to September 1988, weekly.

SPECIFIC CONDUCTANCES: January 1964 to January 1965, twice monthly; October to November 1967 and April 1968 to January 1969, weekly; February 1969 to January 1970 and July 1970 to September 1985, monthly; November 1985 to September 1987, hourly; May to September 1988, weekly.

WATER TEMPERATURES: February 1957 to October 1961, September and October 1962, May 1963 to June 1965, and December 1965 to September 1985, monthly; November 1985 to September 1987, hourly; May to September 1988, weekly.

SEDIMENT DATA: January 1977 to September 1985, monthly; discontinued.

REMARKS.--Discharge includes sewage effluent and some wastewater from industrial plants. City and County sewage treatment plants implemented chemical removal of phosphorus from effluent during water year 1981. Listed herein, the dissolved concentration of a constituent (which is theoretically less than or equal to the total concentration) may sometimes exceed the respective total due to unavoidable errors associated with subsampling and sample processing, or limitations on precision and accuracy of the analytical procedure.

COOPERATION.--All water-quality sampling and analyses prior to July 1970, plus nutrient analyses for period July 1970 to September 1972, from U.S. Environmental Protection Agency. Data in addition to those listed under "Period of Record" for January 1964 to June 1970 may exist in files of U.S. Environmental Protection Agency.

EXTREMES MEASURED FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCES: Maximum, 6,960 microsiemens Sept. 19, 1968; minimum, 1,470 microsiemens July 23, 1986.

WATER TEMPERATURES: Maximum, 29.0°C Aug. 4, 6, 1987; minimum, 2.0°C Jan. 31, 1972.

SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 1,580 mg/L Jan. 14 and Feb. 13, 1985; minimum, 1 mg/L Aug. 1, 1983.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
MAY									
13...	0820	127	2350	7.80	31.0	23.0	1.30	--	--
20...	1020	120	2250	7.70	27.0	22.5	1.80	1.80	14.0
27...	1000	110	1900	7.70	26.0	23.0	2.00	1.90	12.0
JUN									
03...	0930	106	--	7.50	31.5	24.5	2.80	2.80	12.0
10...	0900	117	2100	8.00	27.5	22.5	1.50	1.50	14.0
17...	0935	114	2130	7.90	33.0	24.5	1.60	1.50	13.0
24...	0945	120	2120	7.60	27.5	26.0	1.30	1.40	13.0
JUL									
01...	0800	122	2100	7.60	24.0	25.0	1.30	1.30	15.0
08...	1030	121	2000	7.60	39.5	25.5	1.90	1.90	--
15...	0830	131	2010	7.60	27.0	24.5	1.60	1.60	14.0
22...	0930	124	1980	7.60	30.0	27.5	1.70	1.70	14.0
28...	0815	109	2010	7.40	28.5	26.0	1.40	1.40	13.0
AUG									
03...	1030	124	1910	7.40	33.5	27.5	2.30	2.20	12.0
10...	1040	114	2030	7.50	36.0	27.0	1.90	1.90	13.0
17...	1025	129	1880	7.60	33.0	25.0	2.20	2.30	11.0
24...	1040	129	1940	7.50	35.5	28.0	2.00	2.00	11.0
31...	0955	138	2010	7.60	27.0	27.5	1.90	1.60	8.0
SEP									
07...	1040	143	1930	7.70	30.0	27.0	2.10	1.90	11.0
13...	1000	126	2050	7.60	20.0	22.5	2.10	2.10	11.0
20...	0930	126	1960	7.50	28.0	24.0	1.90	1.90	13.0
27...	0900	124	2150	7.50	22.0	21.0	1.90	1.90	13.0

09419700 LAS VEGAS WASH NEAR HENDERSON, NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
MAY									
13...	--	--	--	16	15	17	0.540	0.440	--
20...	14.0	0.0	0.0	14	14	16	0.640	0.350	0.280
27...	12.0	0.0	0.0	12	12	14	0.460	0.390	0.300
JUN									
03...	12.0	0.0	--	11	--	14	0.420	0.310	0.210
10...	13.0	0.0	0.0	14	13	15	0.590	0.440	0.340
17...	14.0	1.0	0.0	14	13	16	0.710	0.640	0.450
24...	13.0	3.0	1.0	16	14	17	0.510	--	0.470
JUL									
01...	13.0	0.0	0.0	12	11	13	0.810	0.580	0.500
08...	13.0	--	0.0	13	13	15	0.770	0.570	0.410
15...	13.0	0.0	0.0	14	12	16	0.940	0.630	0.570
22...	14.0	0.0	0.0	14	10	16	0.760	0.440	0.350
28...	12.0	0.0	0.0	13	10	14	0.600	0.440	0.370
AUG									
03...	12.0	3.0	0.0	15	11	17	0.570	0.370	0.310
10...	14.0	0.0	0.0	13	14	15	0.690	0.650	0.510
17...	7.9	1.0	2.1	12	10	14	0.590	0.460	0.380
24...	7.6	4.0	4.4	15	12	17	0.730	0.590	0.490
31...	8.4	2.0	1.6	10	10	12	1.00	0.590	0.460
SEP									
07...	11.0	0.0	--	11	--	13	0.980	0.600	0.490
13...	11.0	3.0	3.0	14	14	16	0.880	0.620	0.500
20...	14.0	0.0	0.0	13	12	15	0.990	0.700	0.580
27...	14.0	2.0	0.0	15	13	17	1.00	0.710	0.570

09419753 LAS VEGAS WASH ABOVE THREE KIDS WASH BELOW HENDERSON, NV

LOCATION.--Lat 36°05'53", long 114°56'42", in NW¼NE¼ sec.28, T.21 S., R.63 E., Clark County, Hydrologic Unit 15010015, in Lake Mead National Recreation Area, on left bank 0.1 mi upstream from Three Kids Wash, 2.7 mi southwest of Northshore Road Bridge, and 3.0 mi northeast of Henderson.

DRAINAGE AREA.--2,180 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to September 1988.

GAGE.--Water-stage recorder. Elevation of gage is 1,460 ft, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 241 ft^3/s, Aug. 30, 1988, gage height, 5.94 ft; minimum daily, 114 ft^3/s, June 2, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period, May to September, 241 ft^3/s, Aug. 30, gage height, 5.94 ft; minimum daily, 114 ft^3/s, June 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	146	e138	160	152
2	---	---	---	---	---	---	---	---	114	e138	141	153
3	---	---	---	---	---	---	---	---	139	e139	149	157
4	---	---	---	---	---	---	---	---	130	e139	156	157
5	---	---	---	---	---	---	---	---	137	e139	152	157
6	---	---	---	---	---	---	---	---	150	e144	149	160
7	---	---	---	---	---	---	---	---	154	e143	146	160
8	---	---	---	---	---	---	---	---	137	e132	152	159
9	---	---	---	---	---	---	---	---	135	124	154	162
10	---	---	---	---	---	---	---	---	133	126	152	159
11	---	---	---	---	---	---	---	---	141	134	156	160
12	---	---	---	---	---	---	---	---	138	149	158	160
13	---	---	---	---	---	---	---	---	142	135	157	159
14	---	---	---	---	---	---	---	---	140	150	159	163
15	---	---	---	---	---	---	---	---	148	157	155	158
16	---	---	---	---	---	---	---	---	140	164	157	163
17	---	---	---	---	---	---	---	---	137	164	157	160
18	---	---	---	---	---	---	---	---	132	152	160	159
19	---	---	---	---	---	---	---	---	132	141	157	163
20	---	---	---	---	---	---	---	---	137	140	160	161
21	---	---	---	---	---	---	---	---	140	139	165	158
22	---	---	---	---	---	---	---	---	147	143	159	154
23	---	---	---	---	---	---	---	143	144	145	e160	157
24	---	---	---	---	---	---	---	139	144	146	163	156
25	---	---	---	---	---	---	---	144	139	151	164	148
26	---	---	---	---	---	---	---	152	141	151	164	148
27	---	---	---	---	---	---	---	154	144	154	193	154
28	---	---	---	---	---	---	---	139	140	155	158	161
29	---	---	---	---	---	---	---	136	140	154	157	160
30	---	---	---	---	---	---	---	133	141	146	201	154
31	---	---	---	---	---	---	---	135	---	148	145	---
TOTAL	---	---	---	---	---	---	---	---	4182	4480	4916	4732
MEAN	---	---	---	---	---	---	---	---	139	145	159	158
MAX	---	---	---	---	---	---	---	---	154	164	201	163
MIN	---	---	---	---	---	---	---	---	114	124	141	148
AC-FT	---	---	---	---	---	---	---	---	8290	8890	9750	9390

e Estimated.

09419753 LAS VEGAS WASH ABOVE THREE KIDS WASH BELOW HENDERSON, NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May to September 1988.
CHEMICAL ANALYSES: May to September 1988, weekly.
SPECIFIC CONDUCTANCE: May to September 1988, weekly.
WATER TEMPERATURES: May to September 1988, weekly.

REMARKS.--Discharge includes sewage effluent and wastewater from industrial plants. Listed herein, the dissolved concentration of a constituent (which is theoretically less than or equal to the total concentration) may sometimes exceed the respective total due to unavoidable errors associated with subsampling and sample processing, or limitations on precision and accuracy of the analytical procedure.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM FLOW, INSTAN TANEOUS (FT3/S)	SPE CIFIC CON DUCT ANCE (US/CM)	PH, FIELD (STAND ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)
MAY									
13	1110	111	2470	7.90	35.0	23.5	2.20	2.20	13.0
20	1245	148	2260	7.80	28.0	23.0	2.80	2.80	12.0
27	1100	141		7.80	31.0	24.0	2.90	2.70	10.0
JUN									
03	1054	109	3220	7.70	41.5	27.5	1.70	1.70	14.0
10	1045	93		6.95	27.5	24.5	2.40	2.60	12.0
17	1125	111	2100	7.70	36.0	25.0	2.40	2.40	12.0
24	1230	138	2240	7.70	31.5	26.0	2.40	2.50	13.0
JUL									
01	1515	103	2970	7.70	31.0	29.0	2.40	2.40	11.0
08	1300	138	2130	7.80	39.0	28.0	2.90	2.90	--
15	1100	119	2400	7.80	27.0	28.0	2.60	2.60	13.0
22	1315	147	2100	7.80	31.0	28.5	3.30	3.30	11.0
28	1120	126	2320	7.80	30.5	27.5	2.60	2.60	--
AUG									
03	1215	149	2100	7.70	38.5	28.5	3.20	3.10	11.0
10	1330	153	1950	7.60	35.5	28.0	3.00	3.00	8.2
17	1245	153	[illegible]	7.50	35.0	27.0	2.90	3.00	12.0
24	1300	163	[illegible]	7.70	35.5	29.0	3.00	2.90	10.0
31	1345	154	[illegible]	[illegible]	35.0	30.0	2.80	2.40	9.5
SEP									
07	1200	155	[illegible]	[illegible]	31.0	28.0	2.60	2.50	10.0
13	1230	159	2100	[illegible]	25.5	26.5	3.10	3.00	11.0
20	1210	154	[illegible]	[illegible]	32.5	24.5	2.80	2.70	12.0
27	1245	[illegible]	[illegible]	[illegible]	27.0	24.5	[illegible]	2.80	10.0

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)
MAY									
13	13.0	1.0	0.0	14	13	16	0.500	0.440	0.320
20	12.0	2.0	0.0	14	12	17	0.630	0.310	0.220
27	11.0	2.0	1.0	12	12	15	0.480	0.380	0.310
JUN									
03	13.0	1.0	1.0	15	14	17	0.440	0.320	0.230
10	12.0	0.0	0.0	12	11	14	0.530	0.400	0.320
17	13.0	0.0	0.0	11	10	13	0.610	0.550	0.390
24	12.0	0.0	2.0	13	14	15	0.900	0.440	0.400
JUL									
01	11.0	0.0	0.0	11	11	13	0.760	0.520	0.430
08	11.0	--	0.0	12	11	15	0.800	0.500	0.390
15	12.0	0.0	0.0	12	12	15	0.860	0.590	0.520
22	13.0	1.0		12	--	15	0.510	0.390	0.300
28	--	--	--	9.6	8.4	12	0.580	0.410	0.340
AUG									
03	10.0	1.8	2.0	12	12	15	0.600	0.360	0.310
10		1.0	--	9.2	9.2	12	0.820	0.500	0.380
17	7.8	0.0	3.1	12	11	15	0.770	0.570	0.440
24	7.6	2.0	3.4	12	11	15	0.730	0.560	0.450
31	9.9	0.2	0.0	9.7	9.7	12	1.20	0.490	0.390
SEP									
07	10.0	0.0	0.0	9.7	--	12	0.920	0.600	0.480
13	12.6	2.0	0.0	13	11	16	1.00	0.550	0.460
20	--	0.0	--	12	11	15	0.700	0.610	0.510
27	11.0	3.0	--	13	--	16	0.780	0.630	0.530

09421000 LAKE MEAD AT HOOVER DAM, AZ-NV

LOCATION--Lat 36°00'58", long 114°44'13", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, Mohave-Clark Counties, Hydrologic Unit 15010005, in center of Hoover Dam on Colorado River.

DRAINAGE AREA.--171,700 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

PERIOD OF RECORD.--Contents: February 1935 to current year. Evaporation: March 1952 to current year. Diversions (monthly totals only): to Boulder City area, since October 1935; to Henderson and Las Vegas areas, since April 1942; combined diversions since October 1968. Prior to 1946 published as "at Boulder Dam."

REVISED RECORDS.--WSP 899: 1935-39.

GAGE.--Water-stage indicator read once daily at midnight, with supplementary water-stage recorder. Datum of gage is 0.00 ft to Local Powerhouse datum and is 0.40 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by concrete arch-gravity dam; storage began Feb. 1, 1935; dam completed Mar. 1, 1936. Total capacity (based on 1963-64 resurvey by Coast and Geodetic Survey; capacity table put into use Apr. 1, 1967), 29,755,000 acre-ft, consisting of the following: Dead storage, 2,378,000 acre-ft below gage height 850.0 ft--gage sills in outlet towers; usable contents, 26,159,000 acre-ft between gage heights 895.0 ft and 1,211.4 ft (top of automatic spillway gates in raised position; and uncontrolled storage, 1,218,000 acre-ft between gage heights 1,221.4 ft) and 1,229.0 ft (maximum water surface). Reservoir is used to store water for flood control, irrigation, municipal water supply, and power development. Figures given herein represent usable contents.

DIVERSIONS FROM LAKE MEAD. Diversions to Boulder City area at dam; diversions to Henderson and Las Vegas areas from intakes 6 mi upstream. Diversions measured by Venturi meters. Water used for municipal and industrial purposes.

COOPERATION.--Records of gage height and contents furnished by Bureau of Reclamation. Records of diversions from Lake Mead furnished by Bureau of Reclamation and Colorado River Commission of Nevada.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 27,790,000 acre-ft, July 29, 30, 1941 (on basis of original bathymetry), gage height, 1,220.45 ft; maximum gage height, 1,225.85 ft, July 24, 1983 (equivalent to 26,868,000 acre-ft on basis of resurveyed bathymetry of 1963-64); minimum contents (since 1940), 10,695,000 acre-ft, Apr. 26, 1956, gage height, 1,083.21 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 24,673,000 acre-ft, Feb. 28, gage height, 1,211.82 ft; minimum, 22,792,000 acre-ft, Sept. 29, gage height, 1,199.14 ft.

RESERVOIR STORAGE (THOU AC FT) WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS OBSERVATIONS AT 2400

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24368	24205	24410	24548	24573	24646	24500	24144	23807	23368	23121	22868
2	24374	24201	24418	24544	24568	24638	24497	24136	23786	23362	23099	22867
3	24383	24202	24424	24536	24570	24640	24489	24124	23770	23362	23092	22874
4	24385	24201	24432	24521	24577	24632	24477	24111	23757	23361	23085	22880
5	24386	24205	24451	24515	24589	24635	24459	24094	23748	23343	23077	22887
6	24377	24219	24469	24521	24598	24643	24450	24085	23727	23321	23072	22883
7	24376	24228	24477	24524	24614	24632	24432	24081	23709	23308	23067	22876
8	24377	24237	24473	24519	24615	24623	24418	24072	23689	23299	23057	22876
9	24367	24234	24483	24519	24618	24606	24401	24057	23666	23307	23042	22876
10	24365	24232	24491	24516	24624	24609	24394	24042	23651	23301	23031	22871
11	24359	24238	24495	24501	24626	24608	24379	24028	23646	23294	23018	22873
12	24348	24241	24500	24494	24630	24606	24361	24015	23641	23273	23008	22855
13	24338	24250	24498	24489	24640	24612	24339	24007	23622	23261	23003	22855
14	24335	24261	24497	24491	24627	24606	24326	24006	23600	23248	23008	22839
15	24330	24270	24501	24485	24632	24608	24318	24003	23583	23241	22997	22839
16	24327	24272	24510	24494	24612	24600	24308	23986	23564	23235	22981	22834
17	24329	24276	24516	24510	24612	24594	24308	23982	23550	23232	22973	22834
18	24333	24285	24533	24504	24618	24588	24287	23977	23538	23217	22957	22837
19	24326	24293	24548	24494	24623	24598	24268	23964	23535	23203	22951	22824
20	24311	24303	24568	24497	24632	24602	24256	23949	23524	23182	22948	22813
21	24297	24309	24559	24506	24640	24582	24255	23940	23495	23175	22950	22811
22	24293	24323	24548	24506	24644	24563	24241	23934	23480	23156	22944	22813
23	24281	24327	24554	24519	24650	24554	24238	23918	23465	23155	22929	22803
24	24276	24335	24553	24535	24647	24545	24235	23906	23454	23153	22909	22809
25	24272	24348	24553	24532	24650	24536	24219	23892	23455	23146	22890	22815
26	24255	24371	24551	24536	24655	24538	24201	23874	23452	23130	22880	22806
27	24241	24383	24556	24547	24664	24539	24180	23868	23437	23125	22894	22796
28	24222	24391	24553	24550	24673	24524	24163	23861	23411	23115	22897	22795
29	24216	24403	24548	24557	24655	24513	24153	23859	23393	23104	22886	22792
30	24204	24404	24551	24567	---	24509	24150	23852	23380	23098	22874	22795
31	24199	---	24553	24574	---	24509	---	23831	---	23124	22854	---
MAX	24386	24404	24568	24574	24673	24646	24500	24144	23807	23368	23121	22887
MIN	24199	24201	24410	24485	24568	24509	24150	23831	23380	23098	22854	22792
*	1208.69	1210.05	1211.03	1211.17	1211.70	1210.74	1208.36	1206.23	1203.18	1201.43	1199.57	1199.16
+	-166000	+205000	+149000	+21000	+81000	-146000	-359000	-319000	-451000	-256000	-270000	-59000
++	15060	9820	9820	10640	11550	15890	16320	19940	20970	25500	22770	19030
**	5.1	3.6	5.6	3.3	2.1	2.8	3.4	4.7	5.1	6.2	6.2	6.3
a	63700	45000	71300	61900	27200	34900	42100	58100	63100	75100	75100	75800

CAL YR 1987 MAX 24568 MIN 23738 + +97000 ++ 181520 ** 62.9 a 786600
WTR YR 1988 MAX 24673 MIN 22792 + -1570000 ++ 197310 ** 54.4 a 673300

* Gage height, in feet, at end of month.
+ Change in contents, in acre-feet.
++ Diversions, in acre-feet.
** Gross evaporation, in inches, from Lake Mead.
a Gross evaporation, in acre-feet, from Lake Mead.

NOTE.--Figures of gross evaporation are based on data obtained on Lake Mead by the U.S. Bureau of Reclamation and at Las Vegas by National Weather Service, and are computed by the Geological Survey. Only the mass-transfer method described in Geological Survey Professional Paper 298 is used. "Gross" denotes the total evaporation from the lake without deduction for precipitation on the lake surface for natural losses that would have occurred in the area now occupied by the lake. Starting February 1976, coefficient to 0.00179.

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 36°00'55", long 114°44'16", in NE¼SW¼ sec.3, T.30 N., R.23 W., Gila and Salt River meridian, or SW¼NE¼ sec.29, T.22 S., R.65 E., Mount Diablo meridian, Mohave-Clark Counties, Hydrologic Unit 15030101, in powerhouse at downstream side of Hoover Dam.

DRAINAGE AREA.--171,700 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing (previously considered part of the Missouri River basin).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year (prior to April 1934, monthly discharge only, published in WSP 1313). Published as "near Willow Beach" 1933-39 and as "below Boulder Dam" 1939-45.

GAGE.--Acoustical velocity meters on each turbine in Hoover Dam. Prior to Nov. 1, 1939, water-stage recorder at site 9 mi downstream at datum 594.8 ft, National Geodetic Vertical Datum of 1929. Nov. 1, 1939, to June 30, 1958, water-stage recorder at site 0.8 mi downstream at datum 600.35 ft, above National Geodetic Vertical Datum of 1929. July 1, 1958, to Nov. 7, 1979, totalizing flowmeter on each turbine.

REMARKS.--Flow regulated by Lake Mead since Feb. 1, 1935. Many diversions above station for irrigation, industrial, and municipal use.

COOPERATION.--Records furnished by Bureau of Reclamation.

AVERAGE DISCHARGE.--54 years (water years 1935-88), 14,080 ft^3/s, 10,201,000 acre-ft/yr, unadjusted for storage in Lake Mead.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 50,800 ft^3/s, July 29, 1983; no flow at Hoover Dam part of Feb. 10, 1935; minimum daily, 152 ft^3/s, Feb. 10, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 20,600 ft^3/s, Aug. 5; minimum daily, 6,380 ft^3/s, Nov. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9390	8630	6530	12200	11900	14400	16200	11300	16500	13900	17000	12300
2	9110	10300	8410	14300	12900	14100	14100	13500	17000	12600	18700	13000
3	8150	10600	10100	15600	12100	15100	13600	15700	15900	9300	18500	12200
4	8350	10900	11800	18900	11900	14800	16300	14200	12400	8380	17200	11500
5	10800	8460	9520	17400	12000	12500	18300	14100	9740	14400	20600	9030
6	7200	8920	7280	14100	10700	11000	18600	14600	15100	15100	16800	11500
7	13200	6670	11200	16100	9910	16300	18000	13100	14800	14400	14400	10500
8	10700	8860	10400	14900	13500	13200	19000	12400	17800	14700	16300	9950
9	11100	11900	10800	11700	10900	13900	15300	15500	17400	12500	16600	10700
10	9000	10900	11100	12100	12400	13500	14400	16400	15200	12100	16700	12300
11	9300	12200	10700	17500	13700	11900	17400	16200	13100	15600	18000	7990
12	12600	11600	9150	14800	14100	11900	17300	15400	11500	15300	16900	10800
13	11600	9810	8460	14800	11600	11600	17300	15400	17600	15600	12800	12700
14	11300	7950	12200	12400	11100	12900	17700	12600	17200	15600	10600	11700
15	12800	7880	13000	14600	13100	14300	18000	11700	15900	16000	15300	14200
16	12400	10600	12500	9630	14600	14300	15300	16400	17900	14300	17100	13500
17	9960	9560	12100	11100	14900	14800	15700	12900	16100	13400	17600	10900
18	8550	8170	11900	13900	14900	13900	18800	14300	13800	16800	18400	9820
19	10800	9720	9190	14700	14000	10400	19700	14900	12000	15200	17400	13200
20	12200	9330	7840	14600	12000	11100	20300	16400	16600	16300	14600	11200
21	14200	7400	10700	13900	10700	14600	18500	13500	16700	15700	12800	10100
22	12800	6780	11900	14200	14200	16700	18200	11500	18000	18700	15300	14900
23	12600	9840	11200	9350	14700	14700	14900	15700	15500	13800	17600	11500
24	11000	9370	10300	10800	12400	15900	12700	15300	16600	12200	19000	11000
25	10900	10600	10900	14500	15300	17400	17900	15500	10300	15500	19600	10700
26	13200	7440	9730	12500	14800	11200	17800	16000	12400	16500	15100	13900
27	13000	8680	9940	12400	12600	10900	19100	16200	16900	15700	13200	14700
28	14100	6380	11500	11600	12400	12800	15300	12400	16800	16700	13500	15100
29	12300	6550	10600	12500	15500	11500	16000	12300	16200	16700	16000	14500
30	11600	10400	11200	11300	---	11900	10700	12300	17200	13700	18900	12300
31	11600	---	9930	9410	---	13600	---	15800	---	13100	19000	---
TOTAL	345810	276400	322140	418190	374810	417100	502400	443500	460140	449780	511500	357690
MEAN	11160	9213	10390	13490	12920	13450	16750	14310	15340	14510	16500	11920
MAX	14200	12200	13000	18900	15500	17400	20300	16400	18000	18700	20600	15100
MIN	7200	6380	6590	9410	9910	10400	10700	11300	9740	8380	10600	7990
AC-FT	685900	548200	639000	829500	743400	827300	996500	879700	912700	892100	1015000	709500

CAL YR 1987 TOTAL 5713850 MEAN 15650 MAX 33000 MIN 6380 AC-FT 11330000
WTR YR 1988 TOTAL 4879460 MEAN 13330 MAX 20600 MIN 6380 AC-FT 9678000

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1939 to current year.
CHEMICAL ANALYSES: October 1939 to September 1944, once daily (composited); October 1944 to July 1946 and November 1948 to July 1950, occasional (composited); October 1950 to September 1957, once daily (composited); October 1957 to September 1962, twice monthly (composited); October 1963 to September 1967, three times per month (composited); October 1967 to March 1970, once daily (composited); April 1970 to September 1981, monthly; October 1981 to September 1985, every two months; October 1985 to September 1987, monthly; October 1987 to current year, every two months.
SPECIFIC CONDUCTANCES: October 1939 to July 1957, once daily; August 1957 to September 1962 and October 1963 to March 1970, variable frequency of measurement; April 1970 to September 1977, monthly; October 1977 to September 1987, hourly; October 1987 to current year, every two months.
BIOLOGICAL DATA: November 1974 to September 1977, monthly; October 1977 to September 1981, monthly (seasonal); discontinued.
MICROBIOLOGICAL DATA: November 1974 to September 1981, monthly; October 1981 to September 1985, every two months; October 1985 to September 1987, monthly; October 1987 to current year, every two months.
WATER TEMPERATURES: October 1941 to July 1957, once daily; August 1957 to March 1970, variable frequency of measurement; April 1970 to September 1977, monthly; October 1977 to September 1987, hourly; October 1987 to current year, every two months.
SEDIMENT DATA: August 1975 to September 1981, monthly; October 1981 to September 1985, every two months; October 1985 to September 1987, monthly; October 1987 to current year, every two months.

REMARKS.--Samples collected 0.3 mi downstream from gaging station in Hoover Dam powerhouse. Unpublished chemical analyses for period October 1939 to September 1940 available from the U.S. Geological Survey in Tucson, Ariz.

COOPERATION.--Instantaneous-discharge data provided by U.S. Bureau of Reclamation.

EXTREMES MEASURED FOR PERIOD OF RECORD SINCE OCTOBER 1970.--
SPECIFIC CONDUCTANCES: Maximum, 1,230 microsiemens Jan. 18, 1972; minimum, 787 microsiemens Apr. 20, 1987.
PHYTOPLANKTON: Maximum, 3,800 cells/mL Nov. 5, 1974; minimum, 5 cells/mL Aug. 9, 1977.
FECAL STREPTOCOCCI: Maximum, 150 colonies/100 mL July 21, 1987; minimum, <1 colony/100 mL several times during period of record.
WATER TEMPERATURES: Maximum, 21.5°C July 23, 1983; minimum, 9.0°C Feb. 12, 1975, and Jan. 10, 1976.
SUSPENDED-SEDIMENT CONCENTRATIONS: Maximum, 24 mg/L July 7, 1982; minimum, <1 mg/L on several days in 1976, Oct. 16, 1979, several days in 1980, Sept. 16, 1981, and Mar. 9, 1982.

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (FT3/S)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH, FIELD (STAND-ARD UNITS)	TEMPER-ATURE, AIR (DEG C)	TEMPER-ATURE, WATER (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS TOTAL (MG/L AS CACO3)
OCT												
01...	1230	6400	825	7.60	29.5	13.0	0.40	8.2	80	<2	<2	260
DEC												
02...	1230	6700	825	8.00	14.5	13.0	0.40	8.0	77	<2	K16	270
JAN												
27...	1130	9400	840	7.90	17.0	12.5	0.60	9.6	92	K2	K12	270
MAR												
29...	1500	15500	860	8.10	18.0	11.0	0.50	8.5	80	<2	<2	270
MAY												
31...	1500	31300	--	8.00	29.0	12.5	0.60	8.0	77	--	--	280
JUL												
26...	1300	25800	--	8.00	44.0	12.0	0.50	--	--	<2	<2	270
AUG												
23...	1130	27300	820	8.00	37.0	13.0	0.50	7.6	74	<2	<2	270

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE IT-FLD (MG/L AS HCO3)	ALKA-LINITY CARBON-ATE IT-FLD (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)
OCT												
01...	64	24	70	2	3.7	160	131	200	53	0.30	9.1	526
DEC												
02...	69	24	68	2	3.6	157	129	210	52	0.30	9.6	531
JAN												
27...	66	25	75	2	4.1	155	127	230	58	0.30	9.4	541
MAR												
29...	67	25	73	2	3.9	165	135	210	60	0.30	9.5	546
MAY												
31...	67	26	70	2	3.5	160	131	220	58	0.30	9.4	547
JUL												
26...	66	25	72	2	3.6	162	133	220	58	0.20	9.2	543
AUG												
23...	67	25	70	2	3.3	157	129	230	56	0.30	9.4	554

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09421500 COLORADO RIVER BELOW HOOVER DAM, AZ-NV--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHOROUS TOTAL (MG/L AS P)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)
OCT 01...	505	0.72	<0.010	0.340	0.020	<0.010	0.18	0.20	<0.010	0.010	<0.010	--
DEC 02...	517	0.72	<0.010	0.360	0.010	0.030	0.29	0.30	<0.010	<0.010	<0.010	<10
JAN 27...	545	0.74	<0.010	0.340	0.040	0.020	0.36	0.40	0.010	<0.010	<0.010	--
MAR 29...	531	0.74	<0.010	0.270	0.010	0.020	2.7	2.7	0.110	0.110	0.080	<10
MAY 31...	536	0.74	<0.010	0.400	0.020	0.030	--	<0.20	<0.010	<0.010	<0.010	<10
JUL 26...	535	0.74	<0.010	0.350	0.040	0.060	0.26	0.30	0.010	0.010	0.010	--
AUG 23...	542	0.75	<0.010	0.350	<0.010	<0.010	--	<0.20	0.020	<0.010	<0.010	<10

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT 01...	--	--	--	--	--	--	--	--	--	--	--
DEC 02...	2	100	<0.5	1	<1	<3	23	5	18	31	<1
JAN 27...	--	--	--	--	--	--	--	--	--	--	--
MAR 29...	3	100	<0.5	<1	<1	<3	6	8	<5	34	2
MAY 31...	2	93	<0.5	<1	1	<3	5	6	<5	37	2
JUL 26...	--	--	--	--	--	--	--	--	--	--	--
AUG 23...	2	99	<0.5	<1	<1	<3	1	<3	<5	38	<1

DATE	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 01...	--	--	--	--	--	--	--	--	3	[illegible]	70
DEC 02...	<0.1	<10	2	2	1.0	860	<6	21	2	36	85
JAN 27...	--	--	--	--	--	--	--	--	7	178	27
MAR 29...	<0.1	<10	4	<1	<1.0	880	<6	9	2	84	100
MAY 31...	0.2	<10	4	2	<1.0	900	<6	40	3	254	--
JUL 26...	--	--	--	--	--	--	--	--	3	209	56
AUG 23...	<0.1	<10	1	2	<1.0	870	<6	8	4	295	42

< Actual value is known to be less than value shown.

09422500 LAKE MOHAVE AT DAVIS DAM, AZ-NV

LOCATION.--Lat 35°11'50", long 114°34'07", in SW¼SW¼ sec.18, T.21 N., R.21 W., Gila and Salt River meridian, Mohave County, Hydrologic Unit 15030101, on forebay structure on Arizona side of Davis Dam on Colorado River, 29 mi west of Kingman, Ariz., and 67 mi downstream from Hoover Dam.

DRAINAGE AREA.--173,300 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--January 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Reservoir is formed by earthfill and rockfill dam; dam completed in April 1949 and storage began Jan. 17, 1950. Usable capacity, 1,810,000 acre-ft between elevations 533.39 ft - lowest point of penstock outlet - and 647.0 ft - top of spillway gates. A small amount of additional storage is available through use of splashboards on the spillway gates. Dead storage, 8,530 acre-ft below elevation 533.39 ft. Lake is used for power development, reregulation for irrigation demand, and to satisfy requirements of the Treaty of 1944 with Mexico. Figures given herein represent usable contents.

EXTREMES FOR PERIOD OF RECORD.- Maximum contents, 1,811,000 acre-ft May 24, 1958, May 29, 1963, May 29, 1982; maximum elevation, 647.04 ft May 29, 1963, May 29, 1982; minimum contents (since 1952), 1,168,000 acre-ft Sept. 8, 1953, elevation, 622.15 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 1,796,000 acre-ft Mar. 9, elevation, 646.52 ft; minimum, 1,373,000 acre-ft Oct. 11, elevation, 630.57 ft.

Capacity table (elevation, in feet, and usable contents, in acre-feet)

630	1,359,000	638	1,564,000
632	1,409,000	641	1,644,000
635	1,486,000	644	1,726,000
647	1,810,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1435000	1454000	1576000	1503000	1658000	1771000	1683000	1777000	1764000	1687000	1468000	1522000
2	1426000	1460000	1572000	1507000	1668000	1774000	1677000	1777000	1771000	1676000	1465000	1522000
3	1418000	1473000	1573000	1517000	1675000	1778000	1677000	1773000	1772000	1661000	1464000	1526000
4	1412000	1483000	1570000	1525000	1681000	1780000	1677000	1775000	1769000	1645000	1459000	1524000
5	1407000	1491000	1567000	1530000	1682000	1779000	1679000	1772000	1765000	1637000	1465000	1514000
6	1403000	1499000	1564000	1530000	1685000	1781000	1677000	1773000	1759000	1635000	1463000	1509000
7	1398000	1503000	1564000	1529000	1686000	1788000	1676000	1767000	1755000	1630000	1468000	1505000
8	1393000	1510000	1561000	1533000	1691000	1785000	1681000	1767000	1755000	1627000	1464000	1501000
9	1390000	1525000	1557000	1535000	1693000	1789000	1677000	1767000	1759000	1622000	1459000	1498000
10	1381000	1537000	1557000	1538000	1699000	1785000	1674000	1772000	1760000	1615000	1458000	1496000
11	1386000	1551000	1559000	1551000	1703000	1783000	1676000	1774000	1753000	1614000	1457000	1494000
12	1386000	1564000	1555000	1563000	1706000	1779000	1676000	1773000	1750000	1608000	1451000	1487000
13	1390000	1572000	1554000	1572000	1710000	1779000	1677000	1772000	1752000	1599000	1442000	1488000
14	1393000	1583000	1554000	1575000	1713000	1776000	1677000	1770000	1750000	1591000	1434000	1486000
15	1399000	1581000	1556000	1582000	1715000	1773000	1689000	1767000	1750000	1587000	1428000	1488000
16	1404000	1582000	1554000	1582000	1725000	1770000	1692000	1771000	1753000	1582000	1429000	1487000
17	1404000	1584000	1554000	1588000	1725000	1767000	1699000	1768000	1751000	1578000	1427000	1481000
18	1402000	1582000	1551000	1596000	1735000	1763000	1706000	1767000	1741000	1570000	1427000	1486000
19	1403000	1583000	1547000	1603000	1734000	1751000	1714000	1763000	1740000	1559000	1426000	1482000
20	1406000	1581000	1542000	1607000	1731000	1746000	1730000	1762000	1737000	1548000	1418000	1481000
21	1413000	1579000	1538000	1616000	1732000	1741000	1742000	1759000	1735000	1543000	1421000	1476000
22	1418000	1580000	1530000	1623000	1734000	1743000	1752000	1757000	1737000	1543000	1420000	1482000
23	1421000	1582000	1528000	1618000	1738000	1741000	1760000	1751000	1732000	1535000	1425000	1482000
24	1424000	1580000	1521000	1622000	1737000	1741000	1763000	1750000	1728000	1531000	1440000	1481000
25	1426000	1583000	1525000	1633000	1745000	1746000	1768000	1752000	1714000	1524000	1457000	1485000
26	1431000	1582000	1517000	1635000	1752000	1734000	1772000	1760000	1707000	1512000	1468000	1489000
27	1435000	1582000	1519000	1641000	1757000	1723000	1779000	1764000	1703000	1506000	1478000	1496000
28	1440000	1578000	1515000	1644000	1764000	1708000	1778000	1757000	1702000	1503000	1485000	1504000
29	1446000	1578000	1509000	1646000	1769000	1695000	1782000	1762000	1697000	1496000	1505000	1508000
30	1450000	1582000	1507000	1650000	---	1688000	1777000	1755000	1694000	1494000	1523000	1512000
31	1454000	---	1502000	1653000	---	1682000	---	1754000	---	1475000	1521000	---
MAX	1454000	1584000	1576000	1653000	1769000	1789000	1782000	1777000	1772000	1687000	1523000	1526000
MIN	1381000	1454000	1502000	1503000	1658000	1682000	1674000	1750000	1694000	1475000	1418000	1476000
(*)	633.78	638.65	635.61	641.30	645.53	642.40	645.81	644.99	642.82	634.60	636.35	636.01
(**)	+12000	+128000	-80000	+151000	+116000	-87000	+95000	-23000	-60000	-219000	+46000	-9000

CAL YR 1987 MAX 1781000 MIN 1381000 (**) -22000
WTR YR 1988 MAX 1789000 MIN 1381000 (**) +70000

(*) Elevation, in feet, at end of month.
(**) Change in contents, in acre-feet.

09423C00 COLORADO RIVER BELOW DAVIS DAM, AZ-NV

LOCATION.--Lat 35°11'30", long 114°34'17", in SE¼NE¼ sec.1, T.32 S., R.66 E., Mount Diablo meridian, in Nevada, Clark County, Hydrologic Unit 15030101, on right bank 0.5 mi downstream from Davis Dam, 29 mi west of Kingman, Az., and 68 mi downstream from Hoover Dam.

DRAINAGE AREA.--173,300 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--June 1905 to September 1907 (published as "at Hardyville"), March 1949 to current year.

REVISED RECORDS.--WDR AZ-86-1: 1981.

GAGE.--Water-stage recorder. Datum of gage is 490.00 ft, National Geodetic Vertical Datum of 1929; gage readings have been reduced to elevations NGVD since Oct. 1, 1967. 1905-7, nonrecording gage at site 4.8 mi downstream at datum about 3.4 ft lower. Mar. 16 to May 3, 1949, water-stage recorder at site 0.5 mi downstream at datum 10.00 ft higher. May 4, 1949, to Feb. 24, 1956, water-stage recorder at site 400 ft upstream at datum 10.00 ft higher. Feb. 25, 1956, to Sept. 30, 1967, water-stage recorder at present site at datum 10.00 ft higher.

REMARKS.--No estimated daily discharge. Records good. Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950. Many diversions upstream for irrigation, industrial, and municipal uses.

EXTREMES FOR PERIOD OF RECORD.--1905-7: Maximum daily discharge, 116,000 ft^3/s June 20, 1906; minimum daily, 2,850 ft^3/s Jan. 5, 1906.

1949-88: Maximum discharge, 46,200 ft^3/s July 2, 1983, elevation, 509.48 ft, maximum elevation, 512.01 ft, Apr. 22, 1952; no flow at Davis Dam parts of several days July to September 1950 and Dec. 27, 1950, when gates in dam were closed; minimum daily discharge, 285 ft^3/s Aug. 3, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 26,100 ft^3/s Aug. 15, elevation, 505.41 ft; minimum daily, 4,850 ft^3/s Nov. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13300	9740	9990	10800	8520	12700	16400	12600	13900	18500	21300	10100
2	13800	8340	9840	10900	9070	12800	16800	14500	13300	18500	21200	12200
3	12900	4980	10200	10800	9110	12400	14700	14500	15100	16900	20300	12800
4	12200	4970	11800	15000	8840	13200	16900	13700	14700	17100	20000	12500
5	13400	4960	12000	13700	9390	13400	18200	14800	12200	17800	19200	13400
6	13500	4950	9070	15100	9930	10900	19100	15100	17500	18300	16700	14100
7	13300	4930	12000	16400	8960	13200	18500	15600	17400	17400	13700	12800
8	13100	4910	11700	12600	10300	12800	17600	13300	17600	17100	15700	12500
9	13100	4920	12100	10500	10600	13800	17300	16200	15400	15500	19200	12500
10	12700	4890	11200	10500	10800	14200	15000	14000	15500	14900	18500	12400
11	10500	4870	10700	10200	10800	14300	17300	14600	15600	18700	18700	9710
12	10800	4860	11400	9480	11200	13800	17500	16000	13600	16800	19600	13300
13	10800	4850	8740	9340	10800	11800	17600	16100	16800	19200	18600	12100
14	9750	5230	9950	9500	9660	15300	17600	13600	18500	19900	14400	13100
15	10500	6510	12400	9560	11500	16300	13400	13700	16300	19800	18000	13200
16	10400	9670	12700	10600	11800	15800	13600	14200	16300	17500	18000	13300
17	10200	9730	12100	9220	11800	15900	13200	15800	17600	14700	17200	13300
18	10200	8920	12000	10000	12200	16400	15600	15400	17600	21800	19400	9120
19	11100	8970	12500	10600	12400	15800	15600	16000	14700	22000	16500	13300
20	11100	9000	9580	10600	12900	14300	13600	16000	18100	20600	17700	12800
21	10300	9000	13200	10700	10700	16600	12000	15800	17400	20100	12700	12400
22	11100	6510	13600	10300	12600	16500	13100	13400	17600	21200	16000	11700
23	11200	9520	13500	10400	12800	16500	11900	18100	18600	18000	14800	11700
24	10400	9750	13500	8860	12800	15800	11800	16400	18700	15200	11600	11700
25	10200	8660	9050	9610	11600	15800	15500	14700	18500	20000	11400	9120
26	11000	8020	12400	9560	10600	17100	16100	13100	16400	21300	10300	11700
27	11000	8040	9110	9600	10500	17500	15500	13000	18600	20800	9910	11300
28	11000	8230	12500	9630	8880	19800	15500	14700	18700	19100	10300	11200
29	10000	6530	12700	9650	12800	17600	14600	12100	17700	19600	13900	11200
30	10200	9030	12600	9590	---	17300	12900	16500	18200	21000	10100	11600
31	10100	---	12200	8840	---	15600	---	15500	---	18200	10200	---
TOTAL	353150	213490	356330	332740	314360	465200	464400	459000	438300	579500	500110	362850
MEAN	11390	7116	11490	10730	10840	15010	15480	14810	16610	18690	16130	12090
MAX	13800	9750	13600	16400	12900	19800	19100	18100	18800	22000	21300	14100
MIN	9750	4850	8740	8840	8520	10900	11800	12100	12200	14700	9910	9120
AC-FT	700500	423500	706800	660000	623500	922700	921100	910400	988400	1149000	992000	719700

CAL YR 1987 TOTAL 5706470 MEAN 15630 MAX 25100 MIN 4850 AC-FT 11320000
WTR YR 1988 TOTAL 4899430 MEAN 13390 MAX 22000 MIN 4850 AC-FT 9718000

09423500 COLORADO RIVER AT NEEDLES, CA

LOCATION.--Lat 34°51'06", long 114°36'33", in SE¼SE¼ sec 19, T.9 N., R.23 E., San Bernardino meridian, San Bernardino County, Hydrologic Unit 15030101, on right bank at Needles, 15 mi upstream from Bureau of Reclamation gaging station near Topock, Ariz., 30 mi downstream from Davis Dam, and 97 mi downstream from Hoover Dam.

DRAINAGE AREA.--174,500 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--April 1931 to current year (mean elevations prior to 1988; maximum elevations thereafter).

REVISED RECORDS.--WSP 1119: 1931-47.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to May 15, 1942, at site 550 ft downstream and May 15, 1942 to Feb. 16, 1969, at site 200 ft upstream.

REMARKS.--No record Nov. 3-16. Flow regulated by Lake Mead since Feb. 1, 1935, and by Lake Mohave since Jan. 17, 1950.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 475.77 ft Nov. 30, 1944; minimum, 453.12 ft Aug. 24, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 459.99 ft Aug. 1.

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MAXIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	456.95	454.44	455.20	458.17	455.30	457.26	457.24	457.67	458.44	459.12	459.99	456.60
2	456.99	454.23	455.13	457.21	455.51	457.14	457.52	458.28	458.80	459.05	459.97	456.57
3	457.09	---	455.88	457.19	455.66	457.17	457.84	458.31	457.92	459.59	459.99	456.84
4	456.62	---	456.51	457.18	454.09	457.41	458.38	457.96	458.19	458.97	459.97	456.91
5	456.04		455.64	457.11	454.11	457.40	459.14	457.88	457.89	459.02	459.71	457.03
6	456.95	---	456.56	456.91	454.27	457.45	459.24	458.32	458.65	459.19	459.59	457.23
7	456.79	---	456.63	457.22	455.59	457.37	459.13	458.53	458.81	459.16	457.63	457.21
8	457.00	---	456.57	457.25	454.69	457.54	458.97	458.66	458.32	459.03	459.14	456.70
9	456.87	---	456.70	456.87	454.99	457.91	458.43	458.61	458.89	457.58	459.28	456.77
10	456.63	---	456.61	456.42	454.88	458.35	459.31	458.16	458.57	458.20	458.95	456.68
11	456.18	---	456.27	456.42	455.14	457.86	458.99	458.34	458.54	459.28	459.89	456.70
12	454.72	---	456.51	456.41	455.02	457.69	459.02	458.48	458.56	459.32	459.90	456.85
13	454.56	---	456.49	456.11	455.64	457.71	459.13	458.87	458.62	459.37	459.92	456.98
14	454.36	---	456.11	455.98	455.62	458.32	459.11	458.21	458.91	459.36	459.82	457.70
15	454.50	---	456.70	456.01	455.71	458.50	458.91	457.70	458.98	459.34	459.82	457.91
16	454.45	---	456.77	456.27	455.78	458.48	457.41	457.78	458.70	459.39	459.79	458.06
17	454.47	456.03	456.82	456.38	457.02	458.86	456.40	458.57	458.86	459.27	459.78	458.12
18	454.30	455.91	456.80	456.25	456.56	458.31	457.54	458.80	458.65	459.52	459.81	458.20
19	454.78	454.99	458.08	456.39	456.83	458.43	457.63	458.65	458.21	459.61	459.96	456.92
20	454.74	454.99	457.50	456.34	457.04	458.22	458.16	458.67	458.90	459.65	459.90	457.02
21	454.69	455.00	458.30	456.35	455.87	458.88	456.49	458.68	458.90	459.52	459.72	456.79
22	454.72	454.86	458.37	456.36	457.09	458.69	457.40	458.63	459.89	459.59	459.46	456.86
23	454.75	455.26	458.38	456.13	457.19	458.41	457.01	458.95	458.95	459.72	458.88	456.56
24	454.74	455.41	458.40	456.24	456.50	458.33	456.35	458.91	459.09	459.12	457.98	456.53
25	454.63	455.50	458.20	456.00	456.48	457.82	458.55	458.15	459.08	459.56	456.52	456.54
26	454.67	454.27	458.10	455.90	455.51	458.43	455.68	458.15	459.00	459.73	456.02	456.43
27	454.63	455.01	457.50	455.87	455.29	458.55	458.72	456.53	459.05	459.82	454.69	456.34
28	454.66	454.93	458.10	455.87	455.07	458.87	458.59	456.63	459.15	459.74	454.62	456.24
29	454.61	454.50	458.20	455.67	457.29	458.86	458.46	456.58	459.08	459.75	457.20	456.29
30	454.49	454.96	458.20	455.77	---	458.55	458.03	458.39	458.96	459.84	457.24	456.22
31	454.50	---	458.13	455.82	---	458.63	---	458.53	---	459.90	454.67	---
MAX	457.06	---	458.40	458.17	457.29	458.88	459.24	458.95	459.15	459.90	459.99	458.20

CAL YR 1987 MAX 459.97
WTR YR 1988 MAX 459.99

09423550 TOPOCK MARSH INLET NEAR NEEDLES, CA

LOCATION.--Lat 34°50'10", long 114°35'03", in NE¼NW¼ sec.33, T.9 N., R.23 E., San Bernardino meridian, in Mohave County, Arizona, Hydrologic Unit 15030101, on left bank of Colorado River on north side of intake structure, 1.3 mi east of Needles.

PERIOD OF RECORD.--January 1967 to current year.

GAGE.--Water-stage recorders above and below intake gates to record head and gate openings. Datum of gages is 400.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Jan. 15-26, Feb. 1 to Mar. 13. Records poor prior to Mar. 16; fair thereafter. Topock Marsh inlet diverts water from the Colorado River into Topock Marsh, an area of 4,260 acres. This water flows through the marsh and returns to the Colorado River through the Topock Marsh outlet. The U.S. Fish and Wildlife Service operate the gate settings that control the flow into marsh. Monthly total return flows through the outlet, sta 09423650, Topock Marsh Outlet near Topock, AZ, are shown in the table below. Prior to June 1978, daily flows for this station were published separately.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 249 ft^3/s Mar. 5, 1976; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	27	27	61	e.00	e.00	97	53	89	111	122	41
2	69	19	37	57	e.00	e.00	96	72	85	107	129	56
3	66	.00	22	58	e.00	e.00	89	74	77	103	122	67
4	40	.00	58	98	e.00	e.00	87	67	87	99	122	64
5	53	.00	67	73	e.00	e.00	102	76	69	95	111	66
6	63	.00	38	91	e.00	e.00	118	75	97	109	106	73
7	55	.00	66	107	e.00	e.00	114	102	110	92	71	65
8	55	.00	56	83	e.00	e.00	98	83	121	81	94	49
9	56	.00	71	81	e.00	e.00	97	62	91	54	101	69
10	52	.00	63	55	e.00	e.00	83	70	93	52	82	70
11	25	.00	50	58	e.00	e.00	88	71	94	58	78	58
12	.70	.00	60	52	e.00	e.00	94	81	83	69	80	57
13	4.0	.00	42	48	e.00	e.00	95	98	92	80	71	67
14	.00	2.0	43	48	e.00	50	95	66	112	102	55	65
15	.00	24	72	e60	e.00	90	72	65	90	103	54	74
16	.00	29	71	e60	e.00	92	73	76	90	86	66	76
17	.00	40	72	e60	e.00	93	62	78	104	73	58	77
18	.00	35	68	e60	e.00	87	75	38	117	102	84	50
19	.00	31	70	e60	e.00	99	84	.00	91	114	75	60
20	.00	31	55	e60	e.00	81	84	.00	77	108	70	63
21	.00	32	69	e60	e.00	93	51	.00	113	105	56	56
22	.00	18	80	e60	e.00	99	56	.00	111	123	50	67
23	.00	15	79	e60	e.00	96	49	.00	112	107	53	62
24	.00	36	78	e60	e.00	93	62	.00	118	90	34	61
25	.00	27	63	e60	e.00	93	63	.00	112	101	35	47
26	.00	19	55	e60	e.00	95	83	57	91	127	30	53
27	.00	23	56	48	e.00	100	87	35	106	129	28	55
28	.00	24	61	45	e.00	120	85	53	112	112	28	38
29	.00	8.9	75	41	e.00	110	82	42	102	109	58	24
30	.00	20	73	39	---	96	69	50	103	127	58	60
31	.00	---	60	36	---	98	---	50	---	108	40	---
TOTAL	603.70	460.90	1857	1880	0.00	1685.00	2490	1594.00	2949	3036	2231	1795
MEAN	19.5	15.4	59.9	60.6	.00	54.4	83.0	51.4	98.3	97.9	72.0	59.8
MAX	69	40	80	107	.00	120	118	102	121	129	129	77
MIN	.00	.00	22	36	.00	.00	49	.00	69	52	28	24
AC-FT	1200	914	3680	3730	0	3340	4940	3160	5850	6020	4430	3560
(*)	0	0	0	0	0	0	0	0	0	0	0	0

CAL YR 1987 TOTAL 19236.30 MEAN 52.7 MAX 165 MIN .00 AC-FT 38160 (*) 0
WTR YR 1988 TOTAL 20581.60 MEAN 56.2 MAX 129 MIN .00 AC-FT 40820 (*) 0

e Estimated
* Return flow, in acre-feet, to Colorado River.

DIVERSIONS FROM LAKE HAVASU

09424150 COLORADO RIVER AQUEDUCT NEAR PARKER DAM, AZ-CA

LOCATION.--Lat 34°18'58", long 114°09'23", in NW¼SW¼ sec.28, T.3 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, Hydrologic Unit 15030101, at intake pumping plant of Metropolitan Water District of Southern California on Lake Havasu, 1.8 mi upstream from Parker Dam and 149 mi downstream from Hoover Dam.

PERIOD OF RECORD.--January 1939 to current year (monthly diversions only since October 1942). Published as a supplement to records for Colorado River below Parker Dam, 1942-50. Percolation return flow (monthly flow only) October 1964 to September 1973; prior to October 1964 miscellaneous measurements only.

GAGE.--Venturi meters in pressure lines at intake pumping plant.

REMARKS.--Pumping began Jan. 7, 1939. Figures of monthly diversion shown represent water pumped from Lake Havasu less return surface flow from Gene and Copper Basin Reservoirs. No water returned as surface flow from these reservoirs this year. Percolation return flow from Gene and Copper Basin Reservoirs is estimated by the U.S. Bureau of Reclamation as 10 acre-ft/day for a yearly total of 3,650 acre-ft, which is used for accounting purposes.

COOPERATION.--Diversion records furnished by Metropolitan Water District of Southern California.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily diversion, 3,986 acre-ft, 2,010 ft^3/s Oct. 25, 1970 and Oct. 29, 1977; no diversion at times.

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Month	Diversions			
	Maximum	Minimum	Mean	Total
October	3,560	2,740	3,340	103,546
November	3,420	3,240	3,330	99,899
December	3,480	3,290	3,349	103,804
CAL YR 1987	3,850	1,640	3,513	1,282,277
January	3,390	2,570	3,326	103,115
February	3,480	1,930	3,050	88,448
March	3,500	2,600	3,334	103,354
April	3,540	2,290	3,323	99,686
May	3,480	2,260	3,196	99,078
June	3,520	2,870	3,368	101,025
July	3,570	2,630	3,372	104,548
August	3,790	2,530	3,410	105,713
September	3,560	2,140	3,131	93,933
WTR YR 1988	3,790	1,930	3,295	1,206,149

09424432 FRANCIS CREEK NEAR BAGDAD, AZ

LOCATION.--Lat 34°45'42", long 113°15'54", in NW¼ sec.1, T.16 N., R.10 W., Yavapai County, Hydrologic Unit 15030202, on left bank, 13.1 mi northwest of Bagdad.

DRAINAGE AREA.--134 mi^2.

PERIOD OF RECORD.--December 1984 to current year (operated as a low flow station only).

GAGE.--Water-stage recorder. Elevation of gage is 3,260 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Daily discharges above 20 cfs are not published. Diversion upstream from station for part of the municipal supply for the town of Bagdad was reported by the Cyprus Bagdad Mine to be 1,100 acre-feet in the 1988 water year.

COOPERATION.--Gage-height record was collected in cooperation with the Bureau of Land Management.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	---	1.4	e1.3	8.3	1.4	2.4	3.3	1.6	1.7	5.6	---
2	1.6	---	1.4	e1.3	---	1.5	2.4	2.7	1.9	1.6	5.0	16
3	1.6	---	1.4	e1.3	---	1.7	2.2	2.7	1.6	1.6	2.0	7.3
4	1.6	---	1.4	e1.3	---	1.7	2.2	2.6	1.6	1.6	---	3.6
5	1.6	---	1.4	e1.3	---	1.8	2.2	2.5	1.6	1.6	---	2.2
6	1.6	---	1.4	e1.3	---	1.9	2.1	2.1	1.6	1.7	e3.3	2.1
7	1.7	---	1.4	e1.3	---	2.0	2.4	2.1	1.7	1.9	1.7	1.7
8	1.7	---	1.4	e1.8	---	2.1	2.0	2.1	1.8	1.6	1.3	1.7
9	1.6	e14	1.4	e1.8	---	2.2	1.9	2.2	2.1	1.6	1.3	1.7
10	1.6	e8.6	1.4	e1.8	---	2.6	2.0	2.2	1.8	1.6	1.3	1.7
11	1.6	e4.8	1.4	e1.8	---	2.4	2.0	2.1	1.6	1.7	1.3	1.7
12	1.6	e2.9	1.4	e1.8	16	2.5	2.1	2.1	1.5	1.9	1.3	1.7
13	1.7	2.0	1.4	1.8	12	2.5	2.2	2.1	1.6	2.0	1.3	1.7
14	1.7	2.0	1.4	2.0	8.6	2.7	2.5	2.1	1.6	1.9	1.5	1.7
15	1.7	1.8	1.4	1.7	7.0	2.9	2.6	2.0	1.6	1.7	1.5	1.7
16	1.6	1.8	1.4	1.7	5.6	3.0	2.6	1.9	1.5	1.7	1.4	1.7
17	1.6	1.8	1.7	---	4.5	3.2	2.7	1.9	1.5	1.7	1.3	1.7
18	1.6	1.4	1.6	---	4.0	3.3	2.4	1.8	1.5	1.7	10	1.7
19	1.7	1.4	1.6	---	3.6	3.5	2.4	2.0	1.5	e1.6	20	1.7
20	1.6	1.4	1.5	---	3.0	3.6	2.4	1.6	1.4	1.7	5.0	1.7
21	1.7	1.4	1.4	15	2.6	3.6	2.6	1.5	1.4	1.7	---	1.7
22	1.7	1.4	1.6	14	2.4	3.6	---	1.6	1.5	1.7	13	1.7
23	2.1	1.4	1.4	12	2.1	3.6	---	1.7	1.7	1.6	7.4	1.7
24	2.0	1.4	e1.3	18	1.9	3.8	---	1.7	1.5	1.5	4.1	1.7
25	8.2	1.4	e1.3	17	1.9	3.3	---	1.7	1.5	1.7	---	1.7
26	2.9	1.4	e1.3	10	1.6	3.2	15	1.7	1.7	1.5	---	1.7
27	2.1	1.4	e1.3	10	1.9	3.0	9.1	1.7	1.8	1.7	---	1.7
28	1.3	1.4	e1.3	20	1.4	2.9	6.3	1.7	1.8	2.0	---	1.6
29	1.0	1.4	e1.3	---	1.4	2.7	4.7	1.7	1.7	2.7	16	1.7
30	.88	1.4	e1.3	---	---	2.6	4.0	1.7	2.1	2.5	---	1.6
31	.94	---	e1.3	14	---	2.5	---	1.6	---	4.1	---	---
TOTAL	57.42	---	43.6	---	---	83.3	---	62.4	49.3	56.8	---	---
MEAN	1.85	---	1.41	---	---	2.69	---	2.01	1.64	1.83	---	---
MAX	8.2	---	1.7	---	---	3.8	---	3.3	2.1	4.1	---	---
MIN	.88	---	1.3	---	---	1.4	---	1.5	1.4	1.5	---	---
AC-FT	114	---	86	---	---	165	---	124	98	113	---	---

e Estimated

09424447 BURRO CREEK AT OLD U.S. 93 BRIDGE NEAR BAGDAD, AZ

LOCATION.--Lat 34°32'30", long 113°26'40", in SW¼ sec.19, T.14 N., R.11 W., Mohave County, Hydrologic Unit 15030202, on left bank 15 mi upstream from confluence with Big Sandy River, and 15 mi southwest of Bagdad.

DRAINAGE AREA.--611 mi^2, revised, of which 10 mi^2 is noncontributing.

PERIOD OF RECORD.--August 1980 to current year.

GAGE.--Water stage recorder. Elevation of gage is 1,880 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

AVERAGE DISCHARGE.--8 years, 73.5 ft^3/s, 53,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,600 ft^3/s Mar. 3, 1983, gage height, 13.70 ft; no flow Aug. 15, 1987, July 11, 13-19, 21, 28-31, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 47,400 ft^3/s Feb. 14, 1980, from slope-area measurement of peak flow at present site and datum, gage height, 15.6 ft, from high-water mark in vicinity of gage.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 2	0600	1,020	5.97	Feb. 9	1245	648	5.59
Nov. 6	0545	2,830	7.22	Apr. 23	0415	3,060	7.37
Jan. 18	1315	1,410	6.27	Aug. 21	1145	5,870	8.51
Feb. 3	0515	4,580	8.01	Aug. 27	1745	*6,410	*8.70

No flow July 11, 13-19, 21, 28-31

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.19	4.2	7.3	11	102	14	5.5	15	.55	.10	.02	e100
2	.18	479	7.4	11	84	15	5.3	13	.53	.09	.03	e60
3	.13	174	8.2	11	2320	15	5.1	12	.47	.10	.06	e40
4	.22	80	8.2	10	1180	14	4.9	11	.43	.09	.07	e30
5	.21	70	8.7	11	355	13	4.7	9.5	.37	.06	.07	e20
6	.25	1460	9.2	13	220	13	4.4	8.3	e.35	.06	.06	e17
7	.19	553	9.6	43	250	13	4.1	7.4	e.30	.06	.31	e13
8	.16	172	9.4	55	252	12	4.0	6.9	e.30	.03	.66	e11
9	.21	85	9.4	40	378	12	3.5	6.2	e.25	.02	.36	9.5
10	.26	56	9.3	31	304	11	3.5	5.8	e.24	.02	.22	7.0
11	.30	38	9.2	27	179	11	3.3	5.3	.22	.00	.19	5.9
12	.49	27	8.9	23	131	11	3.4	4.6	.16	.01	.15	e4.0
13	.74	19	8.6	21	84	11	3.5	4.1	.18	.00	.13	e4.0
14	.64	15	8.4	20	65	10	3.6	3.4	.24	.00	.11	e3.0
15	.67	13	8.2	19	44	10	4.8	3.0	.22	.00	.11	e2.0
16	.66	12	8.3	18	36	9.8	7.4	2.6	.20	.00	.09	e2.0
17	.66	9.9	9.8	19	30	9.8	7.2	2.2	.22	.00	.09	e2.0
18	.71	9.1	13	614	27	9.2	7.2	2.0	.22	.00	.18	e1.0
19	.77	8.4	37	705	26	9.0	7.9	1.7	.24	.00	.22	e1.0
20	.75	8.0	27	227	23	8.9	8.2	1.5	.23	.01	.36	e1.0
21	.81	7.7	44	127	22	8.7	9.3	1.4	.18	.00	e1790	e1.0
22	.83	7.4	29	92	20	8.2	75	1.2	.16	.05	e420	e1.0
23	.66	7.3	23	79	19	8.0	1680	1.2	.13	.04	e80	e.90
24	1.3	7.2	18	94	18	7.8	446	.97	.09	.02	e25	e.90
25	1.4	7.0	16	138	17	7.6	233	.95	.07	.02	e15	e.80
26	1.1	6.9	14	124	16	7.2	105	.88	.03	.02	e10	e.80
27	1.2	6.9	13	169	16	6.9	58	.79	.03	.01	e1350	e.70
28	1.3	7.2	12	204	15	6.2	41	.78	.05	.00	e1480	e.70
29	1.5	7.2	11	255	15	5.8	29	.66	.17	.00	e210	e.60
30	1.6	7.1	11	230	---	5.5	19	.60	.15	.00	e50	e.60
31	1.6	---	11	176	---	5.5	---	.57	---	.00	e400	---
TOTAL	21.89	3364.5	427.1	3617	6248	309.1	2796.8	135.50	6.98	0.81	5833.49	341.40
MEAN	.71	112	13.8	117	215	9.97	93.2	4.37	.23	.026	188	11.4
MAX	1.6	1460	44	705	2320	15	1680	15	.55	.10	1790	100
MIN	.13	4.2	7.3	10	15	5.5	3.3	.57	.03	.00	.02	.60
AC-FT	43	6670	847	7170	12390	613	5550	269	14	1.6	11570	677

CAL YR 1987 TOTAL 6754.55 MEAN 18.5 MAX 1460 MIN .00 AC-FT 13400
WTR YR 1988 TOTAL 23102.57 MEAN 63.1 MAX 2320 MIN .00 AC-FT 45820

e Estimated

09424450 BIG SANDY RIVER NEAR WIKIEUP, AZ

LOCATION.--Lat 34°27'45", long 113°37'25", in SE¼ sec.16, T.13 N., R.13 W., Mohave County, Hydrologic Unit 15030201, on left bank 7 mi downstream from Burro Creek, 15 mi upstream from confluence with Santa Maria River, and 17 mi south of Wikieup.

DRAINAGE AREA.--2,742 mi^2, revised, of which 10 mi^2 are noncontributing.

PERIOD OF RECORD.--March 1966 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,400 ft, above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1970, at datum 3.06 ft higher. Oct. 1, 1970, to Oct. 10, 1973, at datum 2.06 ft higher. Supplementary water-stage recorder for low flows at site 75 ft upstream at same datum from Apr. 10, 1975 to Mar. 1, 1978; Mar. 28 to Dec. 7, 1966, and Apr. 2, 1969, to Apr. 9, 1975, at site 0.8 mi downstream at different datum.

REMARKS.--Records fair. Diversions above station for irrigation of about 3,800 acres, mostly by pumping from ground water.

AVERAGE DISCHARGE.--22 years, 83.4 ft^3/s, 60,420 acre-ft/yr; median of yearly mean discharges, 45 ft^3/s, 32,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,500 ft^3/s Feb. 20, 1980, gage height, 12.51 ft, from high-water mark in gage well; minimum daily, 1.3 ft^3/s July 13, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 6	1045	1,830	4.44	Aug. 21	1945	1,300	3.57
Feb. 3	0815	3,020	5.08	Aug. 27	2230	*5,310	*5.76
Apr. 23	0930	1,860	4.24				

Minimum daily discharge, 2.7 ft^3/s Oct. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	86	e6.0	15	84	21	8.7	19	e5.0	5.7	e5.0	e420
2	4.2	113	e6.0	15	70	21	8.7	16	e5.0	5.7	e5.0	e165
3	4.2	149	e6.0	15	1160	20	9.1	e14	e5.0	5.7	e5.0	e50
4	4.2	59	e6.0	15	614	19	9.1	e13	e5.0	5.9	e5.0	e40
5	4.2	48	5.9	15	247	19	8.9	e12	e5.0	6.0	15	e30
6	4.2	674	5.9	16	156	18	8.6	e11	e5.0	5.9	e5.0	e30
7	4.2	390	5.9	16	156	18	8.3	e10	e5.0	5.8	e4.5	e20
8	4.2	e125	5.9	24	197	16	8.5	e10	e5.0	5.9	e4.5	e20
9	4.2	e94	5.9	29	224	16	8.8	e9.0	e5.0	5.7	e4.5	16
10	4.2	e40	6.0	26	268	16	8.7	e9.0	e4.9	5.9	e4.5	13
11	4.2	e20	6.2	23	226	15	8.7	e8.0	5.7	5.8	e4.2	11
12	4.2	e14	6.2	21	158	15	8.7	e8.0	5.7	5.8	4.2	11
13	4.2	e12	6.3	20	115	14	8.4	e8.0	5.7	5.6	4.2	11
14	4.2	e11	6.4	20	86	15	8.4	e7.0	5.7	5.5	4.1	11
15	4.2	e10	6.4	20	68	15	8.7	e7.0	5.3	5.7	3.9	10
16	4.2	e9.0	6.4	20	57	13	8.7	e7.0	5.5	5.6	3.8	10
17	4.2	e9.0	7.9	21	48	13	7.9	e7.0	5.4	5.6	3.7	10
18	4.1	e8.0	10	80	42	13	7.6	e6.0	5.1	5.5	3.5	8.5
19	4.0	e8.0	11	428	37	12	7.6	e6.0	5.2	5.3	3.4	8.3
20	4.0	e7.0	16	166	34	13	7.6	e6.0	5.2	5.3	3.3	8.6
21	4.0	e7.0	19	87	32	12	8.9	e6.0	5.2	5.8	362	8.2
22	4.0	e7.0	24	58	30	12	11	e6.0	5.1	5.4	253	8.7
23	4.0	e7.0	21	47	29	12	754	e5.0	4.8	5.3	e25	8.7
24	4.0	e6.0	20	42	27	11	386	e5.0	5.0	5.1	e220	8.7
25	4.0	e6.0	18	53	26	11	257	e5.0	5.1	e5.0	e80	8.7
26	3.7	e6.0	17	64	25	11	128	e5.0	5.2	e5.0	e100	8.7
27	3.1	e6.0	17	61	24	10	73	e5.0	5.2	e5.0	e500	8.7
28	2.9	e6.0	16	91	23	10	44	e5.0	5.2	e5.0	1160	8.7
29	2.7	e6.0	16	121	22	10	30	e5.0	5.5	e5.0	e90	8.4
30	3.3	e6.0	16	143	---	9.8	24	e5.0	5.6	e5.0	e20	7.9
31	8.3	---	15	112	---	9.0	---	e5.0	---	e5.0	e140	---
TOTAL	127.5	1949.0	341.3	1884	4285	439.8	1885.6	250.0	156.3	170.5	3046.3	988.8
MEAN	4.11	65.0	11.0	60.8	148	14.2	62.9	8.06	5.21	5.50	98.3	33.0
MAX	8.3	674	24	428	1160	21	754	19	5.7	6.0	1160	420
MIN	2.7	6.0	5.9	15	22	9.0	7.6	5.0	4.8	5.0	3.3	7.9
AC-FT	253	3870	677	3740	8500	872	3740	496	310	338	6040	1960

CAL YR 1987 TOTAL 5742.3 MEAN 15.7 MAX 674 MIN 2.7 AC-FT 11390
WTR YR 1988 TOTAL 15524.1 MEAN 42.4 MAX 1160 MIN 2.7 AC-FT 30790

e Estimated

09426000 BILL WILLIAMS RIVER BELOW ALAMO DAM, AZ

LOCATION.--Lat 34°13'51", long 113°36'29", in SE¼SE¼ sec.4, T.10 N., R.13 W., La Paz County, Hydrologic Unit 15030204, on left bank 0.6 mi downstream from Alamo Dam, 3.7 mi downstream from Bullard Wash, and 8 mi downstream from confluence of Santa Maria and Big Sandy Rivers.

DRAINAGE AREA.--4,730 mi^2, approximately, of which 400 mi^2 is below confluence of Santa Maria and Big Sandy Rivers.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for October and November 1939, published in WSP 1313. Prior to October 1943, published as "Williams River near Alamo." October 1943 to September 1967, published as "Bill Williams River near Alamo."

REVISED RECORDS.--WSP 1213: 1939(M), 1941(P).

GAGE.--Water-stage recorder. Elevation of gage is 967 ft above National Geodetic Vertical Datum of 1929, from construction data. Prior to Apr. 9, 1968, at site 1.7 mi upstream at datum 1,002.95 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Diversions above station for irrigation of about 9,100 acres, mostly by pumping from ground water. Flow regulated by Alamo Lake, beginning Mar. 2, 1969. Temporary storage and slight regulation of releases through uncontrolled rectangular conduit through Alamo Dam June 23, 1968, to Mar. 27, 1969. Alamo Lake is formed by an earthfill and rockfill dam, completed in 1968. Total capacity of lake is 1,043,000 acre-ft. See table below for monthend contents.

EXTREMES FOR PERIOD OF RECORD.--1940-68: Maximum discharge, 65,100 ft^3/s Aug. 29, 1951, gage height, 30.8 ft, site and datum then in use; minimum daily, 1.1 ft^3/s Sept. 4, 1958.

1969-88: Maximum discharge, 4,950 ft^3/s Jan. 26, 1969, gage height, 10.20 ft; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--The history of floods that occurred prior to October 1939 is published in WSP 1683. The peak discharges have been correlated with those for Bill Williams River at Planet. The peak discharge for February 1937 has been determined as 105,000 ft^3/s at a stage of 46 ft, site and datum then in use, from rating curve extended above 50,000 ft^3/s on basis of slope-area measurement for flood of Sept. 6, 1939, at a stage of 39.6 ft, discharge of 86,000 ft^3/s and known stable high-water control.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 328 ft^3/s Sept. 3, 4; minimum daily, 10 ft^3/s July 10, 19-22, Aug. 17, 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	44	45	40	43	308	11	13	12	36	19	306
2	46	45	45	40	43	307	11	13	12	15	19	313
3	46	43	44	39	43	308	11	14	12	14	14	328
4	46	43	43	39	43	307	11	14	12	14	12	328
5	47	43	43	40	224	307	11	14	12	14	12	323
6	47	44	43	40	308	307	11	14	12	14	12	322
7	48	44	43	41	307	307	12	14	12	12	12	324
8	48	44	43	40	305	159	13	15	12	11	11	326
9	47	44	43	40	305	51	13	15	12	11	11	323
10	47	44	43	40	305	51	13	15	12	10	11	320
11	47	44	43	40	305	50	13	13	12	11	11	312
12	47	43	43	40	304	52	13	12	12	11	11	315
13	48	42	43	40	302	53	13	12	58	11	11	313
14	46	42	42	40	302	54	13	12	88	11	11	304
15	46	42	41	40	302	54	13	12	89	11	11	297
16	45	42	41	40	302	52	13	12	89	11	11	296
17	44	43	41	42	301	52	13	12	89	12	10	295
18	44	43	42	42	300	35	13	12	89	11	10	296
19	44	43	41	42	300	19	13	12	90	10	11	297
20	44	43	41	42	301	20	13	12	91	10	11	298
21	45	44	42	42	302	22	13	12	91	10	11	298
22	44	43	42	42	301	23	13	12	91	10	11	127
23	44	43	42	42	300	21	13	12	91	12	31	51
24	43	43	41	42	300	19	13	12	91	11	46	51
25	41	43	41	42	309	18	14	12	93	11	46	51
26	42	43	41	43	310	14	13	12	93	14	45	51
27	44	44	40	43	308	12	13	12	94	20	45	51
28	44	45	40	43	307	13	13	12	95	20	45	51
29	45	45	40	43	309	13	13	12	95	19	44	51
30	45	45	40	43	---	12	13	12	95	19	214	52
31	45	---	40	43	---	11	---	12	---	19	305	---
TOTAL	1404	1303	1302	1275	7691	3030	378	394	1756	425	1084	7070
MEAN	45.3	43.4	42.0	41.1	265	97.7	12.6	12.7	58.5	13.7	35.0	236
MAX	48	45	45	43	310	308	14	15	95	36	305	328
MIN	41	42	40	39	43	11	11	12	12	10	10	51
AC-FT	2780	2580	2580	2530	15260	6010	750	781	3480	843	2150	14020
(*)	85460	87950	85770	89650	92590	87680	94740	93180	87760	85590	104900	93590

CAL YR 1987 TOTAL 10988.0 MEAN 30.1 MAX 63 MIN 6.4 AC-FT 21790 (**) -19030
WTR YR 1988 TOTA 27112 MEAN 74.1 MAX 328 MIN 10 AC-FT 53780 (**) +5240

(*) Contents in acre-feet, at end of month in Alamo Lake, furnished by U.S. Army Corps of Engineers.
(**) Change in contents, in acre-feet.

09426600 BILL WILLIAMS RIVER AT MINERAL WASH NEAR PLANET, AZ

LOCATION.--Lat 34°15'18", long 114°00'32", in SE¼NE¼ sec.34, T.11 N., R.17 W., (revised), on boundary between Mohave and La Paz Counties, Hydrologic Unit 15030204, at convergence with Mineral Wash, 4.0 mi west of Planet Ranch, 6.1 mi upstream from waterline of Havasu Lake at elevation 450 ft above National Geodetic Vertical Datum of 1929, and approximately 30 mi downstream from Alamo Lake.

DRAINAGE AREA.--5,140 mi^2 approximately, of which approximately 410 mi^2 is below Alamo Dam.

PERIOD OF RECORD.--January 1970 to January 1972, October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1981.
WATER TEMPERATURES: October 1974 to September 1981.

REMARKS.--Streamflow ungaged.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
OCT 1987											
27...	1100	6.2	860	8.00	22.0	20.5	0.40	760	8.8	98	110
FEB 1988											
23...	1300	E300	840	8.05	21.0	12.0	6.0	757	10.4	97	43
APR											
26...	1245	19	800	8.15	28.0	28.0	0.50	753	7.6	99	34
AUG											
10...	1145	4.2	870	7.80	32.0	23.0	0.50	750	6.7	80	210

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT 1987											
27...	760	220	13	57	18	96	3	6.5	271	0	222
FEB 1986											
23...	100	200	0	46	20	98	3	7.9	246	0	202
APR											
26...	K20	210	0	54	17	86	3	6.1	261	0	214
AUG											
10...	310	220	0	56	19	99	3	6.0	276	0	226

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 1987											
27...	73	91	1.4	33	506	502	0.69	<0.010	0.500	<0.010	0.020
FEB 1988											
23...	95	89	1.2	20	507	502	0.69	<0.010	<0.100	0.020	0.010
APR											
26...	76	79	1.2	31	477	485	0.65	<0.010	0.820	<0.010	0.020
AUG											
10...	76	90	1.3	32	504	515	0.69	<0.010	0.300	<0.010	<0.010

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P) (00673)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
OCT 1987											
27...	--	0.80	0.040	0.030	0.020	0.06	0.04	0.01	<10	8	80
FEB 1988											
23...	0.58	0.60	0.070	0.010	0.020	0.06	0.07	0.0	<10	5	76
APR											
26...	--	<0.20	0.050	0.040	0.030	0.09	0.05	0.01	<10	8	83
AUG											
10...	--	0.20	0.040	0.040	0.040	0.12	0.04	0.0	<10	7	70

E Estimated
K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09426600 BILL WILLIAMS RIVER AT MINERAL WASH NEAR PLANET, AZ--Continued

WATER QUALITY DATA

DATE	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT 1987 27...	<0.5	270	<1	1	<3	<1	4	5	47	3
FEB 1988 23...	<0.5	290	<1	<1	<3	<1	4	<5	38	17
APR 26...	<0.5	230	<1	1	<3	2	<3	<5	38	3
AUG 10...	<0.5	--	2	<1	<3	<1	<3	<5	44	8

DATE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1987 27...	<0.1	<10	2	<1	<1.0	690	8	<3	--	--
FEB 1988 23...	<0.1	<10	<1	<1	<1.0	660	<6	4	--	--
APR 26...	<0.1	<10	4	<1	<1.0	660	10	<3	7	0.37
AUG 10...	<0.1	<10	1	<1	1.0	680	<6	<3	--	--

< Actual value is known to be less than value shown.

09426650 CAP CANAL HAVASU PUMPING PLANT NEAR PARKER, AZ

LOCATION.--Lat 34°17'20", long 114°06'37", in NW¼NW¼ sec.23, T.11 N., R.18 W., La Paz County, Hydrologic Unit 15030204, on left bank of Bill Williams River arm of Lake Havasu, 2 mi upstream from Parker Dam and 19 mi northeast of Parker.

PERIOD OF RECORD.--October 1984 to current year.

REMARKS.--Figures of monthly diversion shown represent water pumped from Lake Havasu for delivery to the Central Arizona Project.

COOPERATION.--Diversion records furnished by U.S. Bureau of Reclamation, Central Arizona Project.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily diversion, 5,200 acre-ft, 2,620 ft^3/s, July 3, 1988; no diversion on many days.

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Month	Diversions			
	Maximum	Minimum	Mean	Total
October	1,480	0	445	13,794
November	1,520	0	205	6,141
December	1,870	0	429	13,289
CAL YR 1987	3,160	0	971	354,565
January	1,370	0	307	9,505
February	1,120	0	539	15,644
March	2,200	0	1,340	41,558
April	2,210	0	1,160	34,664
May	3,450	319	1,610	49,828
June	4,200	2,120	2,650	79,428
July	5,200	2,110	3,500	108,472
August	4,070	1,070	2,560	79,301
September	2,790	0	1,210	36,441
WTR YR 1988	5,200	0	1,330	488,065

WATER QUALITY RECORDS

LOCATION.--Lat 34°10'43", long 114°03'04", in NE¼SE¼ sec.29, T.10 N., R.17 W., La Paz County, Hydrologic Unit 15030104, 7.9 mi southeast of CAP Havasu Pumping Plant, and approximately 18 mi from Parker, AZ.

PERIOD OF RECORD.--August 1985 to current year.

WATER QUALITY DATA

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1987 26...	1400	E10	810	8.20	31.0	27.0	--	740	16.2	210	<10
FEB 1988 24...	0820	530	880	8.10	13.0	11.0	--	740	10.8	101	18
APR 27...	0830	540	875	8.20	24.0	19.5	--	734	9.3	106	--
AUG 10...	0830	1590	870	8.25	32.0	27.5	1	734	9.1	120	12

DATE	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT 1987 26...	--	240	140	55	25	74	2	4.0	116	0	95
FEB 1988 24...	--	270	130	68	25	76	2	4.7	178	0	146
APR 27...	--	270	130	65	25	75	2	3.8	161	0	132
AUG 10...	<1	260	130	61	25	81	2	3.5	154	0	126

DATE	SULFIDE TOTAL (MG/L AS S) (00745)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)
OCT 1987 26...	--	230	60	0.30	8.0	519	514	0.71	0.100	<0.100	0.040
FEB 1988 24...	--	210	64	0.50	10	564	546	0.77	0.200	0.170	<0.010
APR 27...	--	230	60	0.30	8.8	557	548	0.76	0.200	0.230	0.020
AUG 10...	<0.5	200	61	0.30	9.1	557	516	0.76	<0.100	<0.100	<0.010

DATE	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P) (00673)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)
OCT 1987 26...	0.30	0.40	1.8	0.030	0.020	0.010	0.03	0.03	0.01	3	3
FEB 1988 24...	0.20	0.40	1.8	0.010	<0.010	<0.010	--	0.01	--	1	2
APR 27...	0.60	0.80	3.5	<0.010	<0.010	<0.010	--	--	--	2	2
AUG 10...	<0.20	--	--	0.010	<0.010	<0.010	--	0.01	--	2	2

E Estimated
< Actual value is known to be less than value shown.

WATER QUALITY DATA

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
OCT 1987 26...	100	86	100	<1	<1	<1	--	<1	--	<3	<100
FEB 1988 24...	200	95	120	1	1	<1	--	<1	--	3	<100
APR 27...	100	95	100	1	<1	<1	--	<1	--	<3	<100
AUG 10...	<100	100	100	<1	<1	1	19	<1	80	<3	<100

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, INOR-GANIC, TOTAL (MG/L AS C) (00685)
OCT 1987 26...	5	--	<0.10	--	<1	<1.0	--	<3	5.7	18
FEB 1988 24...	<5	--	<0.10	--	<1	1.0	--	<3	--	24
APR 27...	<5	--	<0.10	--	1	<1.0	--	<3	3.2	--
AUG 10...	<5	20	<0.10	4	1	<1.0	10	40	--	21

DATE	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)	ALDRIN, TOTAL (UG/L) (39330)	CHLOR-DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN, TOTAL (UG/L) (39388)
OCT 1987 26...	<0.010	4	--	--	--	--	--	--	--	--
FEB 1988 24...	--	5	--	--	--	--	--	--	--	--
APR 27...	<0.010	<1	--	--	--	--	--	--	--	--
AUG 10...	<0.010	<1	0.03	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010

DATE	ENDRIN, TOTAL (UG/L) (39390)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L) (39250)	PER-THANE TOTAL (UG/L) (39034)	PCB, TOTAL (UG/L) (39516)	TOX-APHENE, TOTAL (UG/L) (39400)
OCT 1987 26...	--	--	--	--	--	--	--	--	--	--
FEB 1988 24...	--	--	--	--	--	--	--	--	--	--
APR 27...	--	--	--	--	--	--	--	--	--	--
AUG 10...	<0.010	<0.010	<0.010	<0.010	<0.01	<0.01	<0.10	<0.1	<0.1	<1

< Actual value is known to be less than value shown.

09427100 CAP CANAL AT MP 162.3 AT 7TH STREET AT PHOENIX, AZ

WATER-QUALITY RECORDS

LOCATION.--Lat 33°42'07", long 112°03'54", in NE¼SE¼SE¼ sec.8, T.4 N., R.3 E., Maricopa County, Hydrologic Unit 15060106, on upstream side of 7th Street Bridge in Phoenix.

PERIOD OF RECORD.--July 1985 to current year.

REMARKS.--Water ponded in canal on dates sampled.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1987											
22...	1045	0.0	800	8.10	26.0	22.5	--	720	11.3	139	17
NOV											
20...	0840	0.0	793	8.58	11.5	14.0	--	729	10.4	106	--
DEC											
31...	1305	0.0	820	8.00	11.0	9.0	--	729	11.6	105	--
JAN 1988											
25...	0935	0.0	830	8.01	15.5	9.0	--	732	12.0	108	<10
FEB											
26...	1045	0.0	820	8.46	20.0	15.0	--	722	10.2	107	--
MAR											
25...	1040	0.0	868	8.51	24.5	18.0	--	723	10.2	114	--
APR											
25...	1115	0.0	850	8.25	24.0	21.0	--	722	8.2	98	<10
MAY											
25...	1030	0.0	860	8.39	29.0	26.0	--	721	9.0	117	--
JUN											
24...	1100	0.0	855	8.29	32.5	28.5	--	718	8.0	110	--
JUL											
21...	1105	0.0	860	8.38	37.0	29.0	2	725	7.8	107	22
AUG											
22...	1020	0.0	870	8.21	33.0	29.0	--	725	7.7	106	--
SEP											
27...	1040	0.0	855	8.25	32.0	26.0	--	723	9.5	124	--

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)
OCT 1987											
22...	--	250	140	57	25	74	2	4.0	119	0	0
NOV											
20...	--	230	140	50	25	75	2	4.1	110	3	0
DEC											
31...	--	250	150	57	26	74	2	3.8	124	0	0
JAN 1988											
25...	--	270	140	65	26	74	2	4.0	150	0	0
FEB											
26...	--	260	140	64	25	75	2	3.8	123	4	0
MAR											
25...	--	260	120	63	25	85	2	3.5	140	4	0
APR											
25...	--	270	140	64	26	75	2	3.8	150	0	0
MAY											
25...	--	270	140	64	26	78	2	4.1	139	5	0
JUN											
24...	--	270	140	64	26	75	2	4.1	149	0	0
JUL											
21...	K17	270	140	64	26	77	2	3.7	143	1	0
AUG											
22...	--	250	130	59	25	72	2	3.6	145	0	0
SEP											
27...	--	260	140	58	27	80	2	4.0	124	0	0

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09427100 CAP CANAL AT MP 162.3 AT 7TH STREET AT PHOENIX, AZ--Continued

WATER QUALITY DATA

DATE	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 1987 22...	98	190	60	0.30	7.9	532	479	0.72	<0.100	<0.100	0.010
NOV 20...	95	210	61	0.30	7.4	522	489	0.71	<0.100	<0.100	--
DEC 31...	102	230	59	0.40	8.5	523	521	0.71	<0.100	<0.100	--
JAN 1988 25...	123	220	60	0.30	8.6	546	533	0.74	0.100	<0.100	0.020
FEB 26...	108	230	59	0.30	6.0	539	536	0.73	<0.100	<0.100	--
MAR 25...	121	220	63	0.40	7.8	552	551	0.75	<0.100	0.120	--
APR 25...	123	230	61	0.30	6.8	556	543	0.76	<0.100	<0.100	0.050
MAY 25...	122	230	63	0.40	7.6	561	550	0.76	0.100	0.120	--
JUN 24...	122	230	62	0.30	7.9	567	546	0.77	0.100	<0.100	--
JUL 21...	119	230	62	0.30	9.0	557	548	0.76	<0.100	0.140	0.010
AUG 22...	119	220	60	0.30	8.9	543	520	0.74	<0.100	<0.100	--
SEP 27...	102	230	64	0.30	8.5	548	539	0.75	<0.100	<0.100	--

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED, (MG/L AS PO4) (00660)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P) (00673)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)
OCT 1987 22...	0.40	--	--	<0.010	<0.010	<0.010	--	--	--	2	2
NOV 20...	0.90	--	--	0.010	--	<0.010	--	0.01	--	--	--
DEC 31...	0.20	--	--	0.010	--	<0.010	--	0.01	--	--	--
JAN 1988 25...	0.30	0.40	1.8	<0.010	0.010	<0.010	--	--	0.01	2	2
FEB 26...	0.20	--	--	0.020	--	<0.010	--	0.02	--	--	--
MAR 25...	0.30	--	--	<0.010	--	<0.010	--	--	--	--	--
APR 25...	0.30	--	--	0.030	0.020	0.020	0.06	0.03	0.0	2	2
MAY 25...	0.40	0.50	2.2	0.020	--	<0.010	--	0.02	--	--	--
JUN 24...	0.70	0.80	3.5	<0.010	--	<0.010	--	--	--	--	--
JUL 21...	<0.20	--	--	0.020	0.020	<0.010	--	0.02	0.02	3	2
AUG 22...	0.30	--	--	0.020	--	<0.010	--	0.02	--	--	--
SEP 27...	0.80	--	--	0.010	--	<0.010	--	0.01	--	--	--

< Actual value is known to be less than value shown.

09427100 CAP CANAL AT MP 162.3 AT 7TH STREET AT PHOENIX, AZ--Continued

WATER QUALITY DATA

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT 1987											
22...	100	92	--	100	<1	<1	<1	--	5	--	4
NOV											
20...	--	--	--	100	--	--	--	--	--	--	<3
DEC											
31...	--	--	--	90	--	--	--	--	--	--	<3
JAN 1988											
25...	200	97	--	90	1	4	1	--	6	--	8
FEB											
26...	--	--	--	100	--	--	--	--	--	--	5
MAR											
25...	--	--	--	130	--	--	--	--	--	--	12
APR											
25...	<100	94	--	110	1	5	<1	--	7	--	7
MAY											
25...	--	--	--	110	--	--	--	--	--	--	4
JUN											
24...	--	--	--	100	--	--	--	--	--	--	12
JUL											
21...	<100	100	80	100	1	3	<1	9	2	300	6
AUG											
22...	--	--	--	100	--	--	--	--	--	--	<3
SEP											
27...	--	--	--	110	--	--	--	--	--	--	<3

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, INOR-GANIC, TOTAL (MG/L AS C) (00685)
OCT 1987											
22...	<100	<5	--	<0.10	--	<1	<1.0	--	11	7.1	22
NOV											
20...	--	--	--	--	--	--	--	--	--	--	--
DEC											
31...	--	--	--	--	--	--	--	--	--	--	--
JAN 1988											
25...	<100	<5	--	<0.10	--	<1	<1.0	--	6	--	22
FEB											
26...	--	--	--	--	--	--	--	--	--	--	--
MAR											
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
25...	<100	<5	--	<0.10	--	<1	<1.0	--	8	--	20
MAY											
25...	--	--	--	--	--	--	--	--	--	--	--
JUN											
24...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	<100	<5	20	<0.10	5	<1	2.0	<10	11	--	20
AUG											
22...	--	--	--	--	--	--	--	--	--	--	--
SEP											
27...	--	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.

09427100 CAP CANAL AT MP 162.3 AT 7TH STREET AT PHOENIX, AZ--Continued

WATER QUALITY DATA

DATE	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) (38260)	ALDRIN, TOTAL (UG/L) (39330)	CHLORDANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DIELDRIN TOTAL (UG/L) (39380)	ENDOSULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)
OCT 1987											
22...	<0.010	1	--	--	--	--	--	--	--	--	--
NOV											
20...	--	--	--	--	--	--	--	--	--	--	--
DEC											
31...	--	--	--	--	--	--	--	--	--	--	--
JAN 1988											
25...	<0.010	1	--	--	--	--	--	--	--	--	--
FEB											
26...	--	--	--	--	--	--	--	--	--	--	--
MAR											
25...	--	--	--	--	--	--	--	--	--	--	--
APR											
25...	<0.010	2	--	--	--	--	--	--	--	--	--
MAY											
25...	--	--	--	--	--	--	--	--	--	--	--
JUN											
24...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	--	3	0.02	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
AUG											
22...	--	--	--	--	--	--	--	--	--	--	--
SEP											
27...	--	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	METHOXYCHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L) (39250)	PERTHANE TOTAL (UG/L) (39034)	PCB, TOTAL (UG/L) (39516)	TOXAPHENE, TOTAL (UG/L) (39400)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT 1987											
22...	--	--	--	--	--	--	--	--	--	17	0.0
NOV											
20...	--	--	--	--	--	--	--	--	--	8	0.0
DEC											
31...	--	--	--	--	--	--	--	--	--	3	0.0
JAN 1988											
25...	--	--	--	--	--	--	--	--	--	41	0.0
FEB											
26...	--	--	--	--	--	--	--	--	--	7	0.0
MAR											
25...	--	--	--	--	--	--	--	--	--	3	0.0
APR											
25...	--	--	--	--	--	--	--	--	--	3	0.0
MAY											
25...	--	--	--	--	--	--	--	--	--	5	0.0
JUN											
24...	--	--	--	--	--	--	--	--	--	15	0.0
JUL											
21...	<0.010	<0.010	<0.010	<0.01	<0.01	<0.10	<0.1	<0.1	<1	30	0.0
AUG											
22...	--	--	--	--	--	--	--	--	--	12	0.0
SEP											
27...	--	--	--	--	--	--	--	--	--	16	0.0

< Actual value is known to be less than value shown.

09427300 CAP CANAL AT MP 252 NEAR COOLIDGE, AZ

WATER-QUALITY RECORDS

LOCATION.--Lat 32°50'08", long 111°25'41", in SW¼SW¼SW¼ sec.4, T.7 S., R.9 E., Pinal County, Hydrologic Unit 15050100, 1.8 mi upstream from Brady Pump Plant and 10.6 mi southeast of Coolidge.

PERIOD OF RECORD.--May 1987 to current year.

REMARKS.--Water ponded in canal at times.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1987											
29...	1300	53	815	--	--	23.0	--	715	12.0	150	--
NOV											
20...	1030	0.0	--	--	--	--	--	--	--	--	--
DEC											
17...	1230	25	800	--	--	10.0	--	710	13.0	124	--
JAN 1988											
26...	1230	70	835	8.20	--	10.5	--	--	--	--	--
MAR											
10...	1230	497	850	8.40	--	17.5	--	715	9.6	107	86
MAY											
27...	1030	600	890	8.30	--	26.5	--	712	8.9	119	--
JUN											
12...	1000	575	855	8.40	31.5	26.0	--	713	8.7	115	--
24...	1553	700	850	8.20	41.0	30.0	--	711	8.7	124	--
JUL											
29...	1045	880	870	8.20	37.0	30.0	1	779	8.5	110	--
AUG											
16...	1300	775	870	8.40	--	29.0	--	715	7.5	105	44
SEP											
02...	1400	600	800	8.40	--	30.0	--	715	7.5	106	<10
28...	1100	0.0	844	8.50	--	26.0	--	715	10.0	132	--

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT 1987											
29...	--	220	140	46	26	79	2	4.3	--	--	--
NOV											
20...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	220	140	46	25	77	2	4.4	--	--	--
JAN 1988											
26...	--	240	130	56	25	73	2	4.1	128	0	105
MAR											
10...	--	260	140	63	25	74	2	4.2	145	0	119
MAY											
27...	--	260	140	62	26	79	2	3.9	--	--	--
JUN											
12...	--	270	150	63	27	80	2	4.0	--	--	--
24...	--	270	140	62	27	76	2	3.9	199	0	163
JUL											
29...	K8	260	140	59	27	80	2	3.9	140	0	114
AUG											
16...	--	270	150	62	27	77	2	4.0	138	0	113
SEP											
02...	--	260	150	60	26	75	2	3.7	138	0	114
28...	--	260	150	58	28	82	2	3.7	133	2	113

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09427300 CAP CANAL AT MP 252 NEAR COOLIDGE, AZ--Continued

WATER QUALITY DATA

DATE	SULFIDE TOTAL (MG/L AS S) (00745)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT 1987											
29...	--	220	61	0.30	4.6	521	490	0.71	<0.100	<0.100	--
NOV											
20...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	200	60	0.30	2.5	506	461	0.69	<0.100	<0.100	--
JAN 1988											
26...	--	230	59	0.30	7.1	526	521	0.72	<0.100	<0.100	--
MAR											
10...	--	230	61	0.30	6.0	543	537	0.74	<0.100	<0.100	0.020
MAY											
27...	--	230	64	0.50	6.7	566	545	0.77	<0.100	<0.100	--
JUN											
12...	--	240	62	0.30	4.1	564	554	0.77	<0.100	<0.100	--
24...	--	230	63	0.40	7.1	562	543	0.76	<0.100	<0.100	--
JUL											
29...	<0.5	230	63	0.30	9.3	678	545	0.92	<0.100	<0.100	--
AUG											
16...	--	240	63	0.20	9.2	554	550	0.75	<0.100	<0.100	0.010
SEP											
02...	<0.5	220	59	0.20	8.3	524	520	0.71	<0.100	<0.100	<0.010
28...	--	240	64	0.30	7.1	554	547	0.75	<0.100	<0.100	--

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P) (00673)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)
OCT 1987											
29...	1.1	<0.010	--	<0.010	--	--	--	--	--	--	--
NOV											
20...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	0.60	<0.010	--	<0.010	--	--	--	--	--	--	--
JAN 1988											
26...	0.50	<0.040	--	<0.010	--	--	--	--	--	--	--
MAR											
10...	--	--	<0.010	<0.010	--	--	--	2	2	<100	87
MAY											
27...	0.50	<0.010	--	<0.010	--	--	--	--	--	--	--
JUN											
12...	0.30	0.010	--	<0.010	--	0.01	--	--	--	--	--
24...	0.40	<0.010	--	0.010	0.03	--	--	--	--	--	--
JUL											
29...	0.50	0.020	--	0.010	0.03	0.02	--	--	--	--	--
AUG											
16...	0.50	0.020	0.010	<0.010	--	0.02	0.01	3	2	100	95
SEP											
02...	0.50	0.010	<0.010	<0.010	--	0.01	--	2	3	<100	100
28...	0.30	0.030	--	<0.010	--	0.03	--	--	--	--	--

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT 1987											
29...	--	110	--	--	--	--	--	--	6	--	--
NOV											
20...	--	--	--	--	--	--	--	--	--	--	--
DEC											
17...	--	100	--	--	--	--	--	--	4	--	--
JAN 1988											
26...	--	90	--	--	--	--	--	--	14	--	--
MAR											
10...	--	110	<1	2	<1	--	2	--	5	<100	<5
MAY											
27...	--	110	--	--	--	--	--	--	18	--	--
JUN											
12...	--	120	--	--	--	--	--	--	460	--	--
24...	--	110	--	--	--	--	--	--	20	--	--
JUL											
29...	60	100	--	--	--	4	--	80	8	--	--
AUG											
16...	--	100	3	5	1	--	11	--	6	<100	<5
SEP											
02...	--	100	<1	2	1	--	<1	--	<3	<100	<5
28...	--	110	--	--	--	--	--	--	6	--	--

< Actual value is known to be less then value shown.

09427300 CAP CANAL AT MP 252 NEAR COOLIDGE, AZ--Continued

WATER QUALITY DATA

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, INORGANIC, TOTAL (MG/L AS C) (00685)	CYANIDE TOTAL (MG/L AS CN) (00720)	PHENOLS TOTAL (UG/L) (32730)
OCT 1987 29...	--	--	--	--	--	--	--	--	--	--
NOV 20...	--	--	--	--	--	--	--	--	--	--
DEC 17...	--	--	--	--	--	--	--	--	--	--
JAN 1988 26...	--	--	--	--	--	--	--	--	--	--
MAR 10...	--	<0.10	--	1	<1.0	--	<3	19	<0.010	4
MAY 27...	--	--	--	--	--	--	--	--	--	--
JUN 12...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
JUL 29...	20	--	7	--	--	<10	--	--	--	--
AUG 16...	--	<0.10	--	<1	<1.0	--	25	18	<0.010	<1
SEP 02...	--	<0.10	--	<1	<1.0	--	7	18	0.010	4
28...	--	--	--	--	--	--	--	--	--	--

DATE	METHYLENE BLUE ACTIVE SUBSTANCE (MG/L) (38260)	ALDRIN, TOTAL (UG/L) (39330)	CHLORDANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DIELDRIN TOTAL (UG/L) (39380)	ENDOSULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	HEPTACHLOR, TOTAL (UG/L) (39410)
OCT 1987 29...	--	--	--	--	--	--	--	--	--	--
NOV 20...	--	--	--	--	--	--	--	--	--	--
DEC 17...	--	--	--	--	--	--	--	--	--	--
JAN 1988 26...	--	--	--	--	--	--	--	--	--	--
MAR 10...	--	--	--	--	--	--	--	--	--	--
MAY 27...	--	--	--	--	--	--	--	--	--	--
JUN 12...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
JUL 29...	0.03	<0.010	<0.1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
AUG 16...	--	--	--	--	--	--	--	--	--	--
SEP 02...	--	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--	--

DATE	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	LINDANE TOTAL (UG/L) (39340)	METHOXYCHLOR, TOTAL (UG/L) (39480)	MIREX, TOTAL (UG/L) (39755)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L) (39250)	PERTHANE TOTAL (UG/L) (39034)	PCB, TOTAL (UG/L) (39516)	TOXAPHENE, TOTAL (UG/L) (39400)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT 1987 29...	--	--	--	--	--	--	--	--	--	--
NOV 20...	--	--	--	--	--	--	--	--	--	--
DEC 17...	--	--	--	--	--	--	--	--	--	--
JAN 1988 26...	--	--	--	--	--	--	--	--	--	--
MAR 10...	--	--	--	--	--	--	--	--	21	28
MAY 27...	--	--	--	--	--	--	--	--	--	--
JUN 12...	--	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--	--
JUL 29...	<0.010	<0.010	<0.01	<0.01	<0.10	<0.1	<0.1	<1	4	9.5
AUG 16...	--	--	--	--	--	--	--	--	7	15
SEP 02...	--	--	--	--	--	--	--	--	1	1.6
28...	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.

09427500 LAKE HAVASU NEAR PARKER DAM, AZ-CA

LOCATION.--Lat 34°18'58", long 114°09'23", in NW¼SW¼ sec.28, T.3 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, Hydrologic Unit 15030101, at intake pumping plant for Colorado River aqueduct of Metropolitan Water District of Southern California, 1.8 mi upstream from Parker Dam on Colorado River, and 149 mi downstream from Hoover Dam.

DRAINAGE AREA.--182,700 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--July 1938 to current year. Published as "Parker Reservoir near Parker Dam" 1938.

REVISED RECORDS.- WRD Ariz. 1975: 1974 (elevation).

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by concrete-arch dam; dam was completed and storage began July 1, 1938. Usable capacity - based on April 1957 re-survey by Bureau of Reclamation between elevations 430.54 ft and 450.54 ft - 619,400 acre-ft between elevations 400.54 ft, sill of regulating gates, and 450.54 ft, top of regulating gates. Prior to Oct. 1, 1956, different capacity table used. Dead storage, 28,600 acre-ft below elevation 400.54 ft, based on original survey. About 0.07 ft fall indicated between gage and Parker Dam under normal operating conditions. drawdown below elevation 440.54 ft not legally permissible except by consent of the Metropolitan Water District of Southern California or in an emergency affecting the safety of the dam. Lake is used for flood control, power development, re-regulation of river for irrigation demand, and as a basin from which water is pumped by Metropolitan Water District of Southern California to Colorado River aqueduct. Figures given herein represent usable contents. For record of diversion to Colorado River aqueduct, see record for Colorado River aqueduct near Parker Dam elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum storage, 693,000 acre-ft, by temporary use of flashboards, Apr. 18, 1943, June 4, 1953; maximum elevation, 451.25 ft May 27, 1988, affected by wind; minimum storage, 71,400 acre-ft June 25, 1942, elevation, 412.09 ft.

EXTREMES FOR CURRENT YEAR.--Maximum storage, not determined, maximum elevation, 451.13 ft May 27, affected by wind; minimum storage, 537,800 acre-ft Nov. 16, elevation, 446.27 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
OBSERVATION AT 24.00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	578100	587600	541800	570700	549700	548600	[illegible]	614600	612000	[illegible]	[illegible]	584200
2	577100	591400	546100	567500	552200	552100	555900	608200	618800	[illegible]	[illegible]	582300
3	577100	597000	546300	564800	553100	561500	554300	607000	612000	[illegible]	[illegible]	578300
4	575400	596400	548100	564600	548600	563100	550400	604000	609000	607400	[illegible]	575800
5	576600	597000	552100	562900	549000	563300	550400	609400	603200	605400	[illegible]	574900
6	572800	591800	553900	561100	549900	562700	551300	607000	597800	607800	609400	576400
7	570900	587600	554300	562200	551000	557100	558100	611200	602200	611400	603600	578100
8	576200	581900	554400	561500	549500	553900	564000	[illegible]	605400	610400	[illegible]	580400
9	577300	575800	556900	563100	548600	556300	564800	606200	611400	603000	[illegible]	578700
10	577500	570900	557700	560300	549500	561300	563500	606800	613000	590600	[illegible]	577500
11	580800	568200	559800	557900	547600	563700	560100	605200	611000	583400	[illegible]	574900
12	583800	562000	559200	554400	548100	561300	562700	612000	608400	580900	597400	566500
13	582700	556900	557500	549900	548600	556700	566100	619000	600200	580400	600200	566100
14	580400	550300	549700	545200	549000	552800	575200	619200	602400	585700	599200	563500
15	580900	543600	547400	542700	548100	550400	584200	617200	602400	587200	594000	567800
16	580800	539100	548600	542000	551000	550600	585900	610200	605000	585700	593600	570100
17	579600	540000	551900	544100	550800	556300	586000	607400	605000	578500	590100	572800
18	577300	541800	553000	544000	553500	556700	588500	605800	607400	572400	592800	575400
19	574900	544100	555400	543100	555400	556200	596200	612800	607000	574300	591800	569500
20	573000	545400	557700	543200	558800	554300	603800	611000	597800	582100	596400	572400
21	573000	544100	555800	545400	562400	553300	614800	609400	599400	585500	598800	573500
22	573300	543600	558600	545600	555400	555400	614200	610200	602200	589500	596000	579200
23	574100	541100	563700	548100	557500	556500	614200	609000	606200	590400	599000	581100
24	576600	542500	568400	549700	560300	563100	612800	618200	610000	586600	603400	580900
25	575100	547700	571400	548500	565700	560000	605800	619400	612400	579200	607400	580000
26	572200	549000	568200	548600	562700	554600	607800	625200	610400	581900	605200	573900
27	570700	547700	569500	547600	559000	553900	608200	622400	606200	586600	598000	573900
28	568600	546300	565700	547400	555400	551200	618000	618200	606200	595800	590600	573900
29	572600	544500	567300	547600	548100	555600	619800	613800	607000	594200	591800	578300
30	573200	539100	568800	548500	---	556000	620200	604600	611400	595000	589900	578700
31	580000	---	570900	548500	---	561800	---	609000	---	592400	584700	---
MAX	583800	597000	571400	570700	565700	563700	620200	625200	618800	615400	609400	584200
MIN	568600	539100	541800	542000	547600	548600	550400	604000	597800	572400	584700	563500
(**)	+6600	-40900	+31800	-22400	-400	+13700	+58400	-11200	+2400	-19000	-7700	-6000

CAL YR 1987 MAX 624800 MIN 539100 (**) -24700
WTR YR 1988 MAX 625200 MIN 539100 (**) +5300

(**) Change in storage, in acre-feet.

09427500 LAKE HAVASU NEAR PARKER DAM, AZ-CA--Continued

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	448.44	448.94	446.49	448.05	446.93	446.87	447.46	450.30	450.17	450.26	449.23	448.76
2	448.39	449.14	446.73	447.88	447.07	447.06	447.32	449.98	450.51	450.34	449.38	448.66
3	448.39	449.42	446.74	447.74	447.12	447.56	447.21	449.92	450.17	450.16	449.46	448.45
4	448.30	449.39	446.84	447.73	446.88	447.65	446.97	449.77	450.02	449.94	449.79	448.32
5	448.36	449.42	447.06	447.64	446.89	447.66	446.97	450.04	449.73	449.84	449.96	448.27
6	448.16	449.16	447.16	447.54	446.94	447.63	447.02	449.92	449.46	449.96	450.04	448.35
7	448.06	448.94	447.18	447.60	447.00	447.33	447.38	450.13	449.68	450.14	449.75	448.44
8	448.34	448.64	447.19	447.56	446.92	447.16	447.70	450.22	449.84	450.09	449.27	448.56
9	448.40	448.32	447.32	447.65	446.87	447.29	447.74	449.88	450.14	449.72	449.30	448.47
10	448.41	448.06	447.36	447.50	446.92	447.55	447.67	449.91	450.22	449.10	449.22	448.41
11	448.58	447.92	447.47	447.37	446.81	447.68	447.49	449.83	450.12	448.72	449.31	448.27
12	448.74	447.59	447.44	447.19	446.84	447.55	447.63	450.17	449.99	448.59	449.44	447.85
13	448.68	447.32	447.35	446.94	446.87	447.31	447.81	450.52	449.58	448.56	449.58	447.81
14	448.56	446.96	446.93	446.68	446.89	447.10	448.29	450.53	449.69	448.84	449.53	447.67
15	448.59	446.59	446.80	446.54	446.84	446.97	448.76	450.43	449.69	448.92	449.27	447.90
16	448.58	446.34	446.87	446.50	447.00	446.98	448.35	450.08	449.82	448.84	449.25	448.02
17	448.52	446.39	447.05	446.62	446.99	447.29	448.96	449.94	449.82	448.46	449.07	448.16
18	448.40	446.49	447.11	446.61	447.14	447.31	448.99	449.86	449.94	448.14	449.21	448.30
19	448.27	446.62	447.24	446.56	447.24	447.28	449.38	450.21	449.92	448.24	449.16	447.99
20	448.17	446.69	447.36	446.57	447.42	447.18	449.76	450.12	449.46	448.65	449.39	448.14
21	448.17	446.62	447.26	446.69	447.61	447.13	450.31	450.04	449.54	448.83	449.51	448.20
22	448.19	446.59	447.41	446.70	447.24	447.24	450.28	450.08	449.68	449.04	449.37	448.50
23	448.23	446.45	447.68	446.84	447.35	447.30	450.28	450.02	449.88	449.09	449.52	448.60
24	448.36	446.53	447.93	446.93	447.50	447.65	450.21	450.48	450.07	448.89	449.74	448.59
25	448.28	446.82	448.09	446.86	447.79	447.48	449.86	450.54	450.19	448.50	449.94	448.54
26	448.13	446.89	447.92	446.87	447.63	447.20	449.96	450.93	450.09	448.64	449.83	448.22
27	448.05	446.82	447.99	446.81	447.43	447.16	449.98	450.79	449.88	448.89	449.47	448.22
28	447.94	446.74	447.79	446.80	447.24	447.01	450.47	450.48	449.88	449.36	449.10	448.22
29	448.15	446.64	447.87	446.81	446.84	447.25	450.56	450.26	449.92	449.28	449.16	448.45
30	448.18	446.34	447.95	446.86	---	447.27	450.58	449.80	450.14	449.32	449.06	448.47
31	448.54	---	448.06	446.86	---	447.58	---	450.02	---	449.19	448.79	---
MAX	448.74	449.42	448.09	448.05	447.79	447.68	450.58	450.93	450.51	450.34	450.04	448.76
MIN	447.94	446.34	446.49	446.50	446.81	446.87	446.97	449.77	449.46	448.14	448.79	447.67

WTR YR 1988 MAX 450.93 MIN 446.34

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA

LOCATION.--Lat 34°17'44", long 114°08'22", in NW¼NW¼ sec.3, T.2 N., R.27 E., San Bernardino meridian, in California, San Bernardino County, Hydrologic Unit 15030104, on north end of powerplant at Parker Dam, 13 mi northeast of Parker, Ariz., and 14 mi upstream from Headgate Rock Dam.

DRAINAGE AREA.--182,700 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February to September 1934 (gage heights and fragmentary discharge records), October 1934 to current year. Prior to October 1937, published as "near Parker, Ariz."

REVISED RECORDS.--WSP 1313: 1941(M).

GAGE.--Water-stage recorder. Datum of gage is 300.54 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1967, at site 3.8 mi downstream at datum 346.23 ft above NGVD.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Mead since Feb. 1, 1935, by Lake Mohave since Jan. 17, 1950, and by Lake Havasu since July 1, 1938. Many diversions above station. For record of diversion to Colorado River aqueduct and return flows, see record for Colorado River aqueduct near Parker Dam, elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42,400 ft^3/s Feb. 8, 1937; no flow at Parker Dam for parts of several days in 1942 when gates in dam were closed; minimum daily discharge, 920 ft^3/s Jan. 11, 1978.

An unregulated discharge of probably less than 1,350 ft^3/s occurred Aug. 18, 1934 (lowest unregulated discharge since 1917 and probably since a much earlier date).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 17,100 ft^3/s July 18; minimum daily, 2,890 ft^3/s Nov. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8530	4210	6340	11000	7250	9860	14400	11800	10800	12500	16200	7310
2	11400	5100	6620	11000	7220	8390	14600	12700	7900	13700	16100	8570
3	11900	3470	6560	11000	8460	6990	14100	12100	12600	14400	16100	11200
4	12100	3110	7400	10900	8620	9100	13600	12500	13100	14700	12700	10300
5	11100	2890	8360	12900	7480	9990	13400	7870	12600	14000	14200	10600
6	11300	5410	8220	13000	7530	10700	15300	12800	13400	13000	14000	10000
7	11500	5740	8320	13000	7490	11000	12500	12600	11400	11400	14600	10100
8	8460	6440	9500	13100	8430	10600	13400	12300	13100	14200	15900	8100
9	10400	5930	9290	10300	8400	10700	13600	13400	10000	15500	15900	9730
10	11000	5860	9380	10500	8420	8890	13900	12500	11500	15900	16100	9630
11	8910	5260	9460	10500	8690	10800	14200	12300	13300	16100	13600	10300
12	8260	4970	9390	10400	8690	12000	13400	9640	13000	16100	14500	11300
13	8410	5730	9410	10400	8700	12300	12600	10400	15000	15000	14600	9900
14	9690	6360	9440	10300	8640	12000	10200	12300	14000	13400	14300	10300
15	7360	6260	9370	9390	8670	13100	9490	12300	13800	14900	14500	8250
16	7700	6980	9380	8480	8660	12900	9440	14800	11700	14900	14100	9570
17	8870	7070	9510	8540	8450	9920	8820	13400	14400	15500	15400	10000
18	9450	6680	9550	8820	8430	12300	10400	13000	14800	17100	13200	10100
19	9250	5800	9530	9310	9100	13600	8980	9580	14300	16400	14400	10500
20	9330	6150	9530	8360	9350	13800	9520	13800	14600	15200	14100	10200
21	8700	7460	9460	7930	9150	13000	5840	13100	13600	12700	12500	11000
22	7960	6340	9630	7800	10800	13400	9720	11700	12600	15300	12300	7990
23	8360	5930	9630	7830	9080	13600	10700	12300	11200	15000	11900	9530
24	8080	6520	9610	7780	9070	10400	9910	11200	12400	14100	9310	10100
25	9110	5760	9610	7760	7750	14100	13400	11500	13700	15900	7010	9890
26	9160	5880	9640	7780	10100	15500	12200	8330	14300	15700	10400	10200
27	9620	6400	9820	7770	10500	16200	13100	11600	15400	14700	11000	9650
28	8870	7180	9760	7800	10500	16000	8310	13500	14700	11900	10800	9780
29	6460	6910	9830	7830	10500	13100	11800	13400	14000	15500	9920	6560
30	7140	7750	10000	7810	---	14000	11800	13200	11700	16000	9780	9440
31	5250	---	10000	7820	---	11200	---	10700	---	16300	9720	---
TOTAL	283630	175550	281550	297010	254130	369440	352630	372620	388900	457000	409140	290700
MEAN	9149	5852	9082	9581	8763	11920	11750	12020	12960	14740	13200	9690
MAX	12100	7750	10000	13100	10800	16200	15300	14800	15400	17100	16200	11300
MIN	5250	2890	6340	7760	7220	6990	5840	7870	7900	11400	7010	6560
AC-FT	562600	348200	558500	589100	504100	732800	699400	739100	771400	906500	811500	576600

CAL YR 1987 TOTAL 4820120 MEAN 13210 MAX 22100 MIN 2890 AC-FT 9561000
WTR YR 1988 TOTAL 3932300 MEAN 10740 MAX 17100 MIN 2890 AC-FT 7800000

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1963 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1982 to current year.
WATER TEMPERATURES: February 1954 to August 1970; September 1982 to current year.

EXTREMES FOR PERIOD OF DAILY RECORDS.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,510 microsiemens Dec. 14, 1986; minimum recorded, 804 microsiemens July 20, 1987.
WATER TEMPERATURE: Maximum recorded, 28.5°C Aug. 12, 13, 18, 1955; minimum recorded, 7.5°C Jan. 11, 1983

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 910 microsiemens Oct. 8, May 19, 21-23, 31, June 1; minimum recorded, 820 microsiemens May 29.
WATER TEMPERATURE: Maximum recorded, 26.1°C Aug. 5; minimum recorded, 8.1°C Jan. 4.

INSTRUMENTATION.--Water temperature recorder from February 1954 to August 1970. Specific conductance and water temperature recorder from September 1982 to current year.

REMARKS.--Prior to October 1968, published as 09428000.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1987 27...	1345	13700	850	7.95	30.0	21.0	1.5	760	7.9	89	<10
DEC 15...	1145	9130	850	8.00	10.0	11.5	2.2	760	10.2	94	13
FEB 1988 24...	1145	13300	860	8.00	18.0	12.5	1.4	760	10.5	99	20
APR 27...	1145	18500	880	8.20	31.0	18.0	1.2	758	9.0	96	<24
JUN 14...	1115	18200	860	8.20	40.0	22.5	1.4	758	8.6	100	38
AUG 09...	1400	18800	890	8.00	42.5	25.5	2.0	755	7.5	93	20

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT 1987 27...	<1	K16	270	140	67	25	72	2	3.8	159	0
DEC 15...	<1	K3	280	150	69	26	77	2	4.0	156	0
FEB 1988 24...	<1	K2	280	140	69	25	72	2	4.3	159	0
APR 27...	<1	<1	270	140	66	25	75	2	3.7	164	0
JUN 14...	<1	100	280	100	68	26	74	2	4.1	166	0
AUG 09...	<1	K4	290	160	69	28	78	2	3.4	159	0

DATE	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 1987 27...	130	220	58	0.30	542	523	0.74	7	0.100	0.020
DEC 15...	128	210	64	0.30	544	528	0.74	2	0.200	0.020
FEB 1988 24...	130	220	59	0.40	551	530	0.75	6	0.200	<0.010
APR 27...	134	220	59	0.30	554	529	0.75	<1	0.300	<0.010
JUN 14...	136	220	60	0.40	558	558	0.76	2	0.200	<0.010
AUG 09...	130	220	61	0.30	551	538	0.75	6	0.200	0.020

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

WATER QUALITY DATA

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BORON, DISSOLVED (UG/L AS B) (01020)
OCT 1987 27...	--	<0.20	--	--	0.010	0.01	2	2	100	110
DEC 15...	0.18	0.20	0.40	1.8	0.010	0.01	2	2	100	100
FEB 1988 24...	--	0.30	0.50	2.2	0.010	0.01	2	2	97	100
APR 27...	--	<0.20	--	--	<0.010	--	2	3	96	110
JUN 14...	--	0.40	0.60	2.7	<0.010	--	2	2	96	100
AUG 09...	0.28	0.30	0.50	2.2	0.020	0.02	2	2	100	110

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)
OCT 1987 27...	<1	<1	1	1	7	2	130	<3	5	8
DEC 15...	<1	<1	<1	<1	9	3	120	4	6	<5
FEB 1988 24...	1	<1	2	<1	10	2	70	20	<5	<5
APR 27...	1	<1	<1	1	9	1	50	<3	13	<5
JUN 14...	2	<1	2	<1	10	4	80	3	12	5
AUG 09...	<1	2	<1	1	15	2	120	6	<5	<5

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT 1987 27...	20	1	--	2	2	<1.0	<10	7	3	100
DEC 15...	10	2	--	2	2	<1.0	<10	7	1	37
FEB 1988 24...	<10	1	<0.10	2	2	<1.0	<10	26	2	75
APR 27...	<10	1	<0.10	2	2	<1.0	<10	<3	1	70
JUN 14...	20	2	<0.10	3	3	<1.0	<10	4	2	79
AUG 09...	30	3	<0.10	2	2	<1.0	10	<3	2	117

< Actual value is known to be less than value shown.

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	880	830	873	---	---	---	871	852	862	850	840	847
2	890	880	883	---	---	---	870	859	864	850	840	843
3	900	870	887	---	---	---	869	858	863	850	840	845
4	900	880	888	---	---	---	868	856	863	850	840	846
5	900	880	896	---	---	---	866	855	862	851	840	849
6	900	890	899	898	---	---	865	853	860	852	841	850
7	900	890	898	886	866	877	863	852	861	852	842	849
8	910	890	899	885	875	876	862	850	860	853	843	850
9	900	890	899	885	874	875	860	849	858	854	843	853
10	900	890	899	884	873	876	858	857	858	855	844	853
11	900	---	---	883	872	874	857	847	856	855	845	853
12	---	---	---	882	871	872	855	844	853	865	846	854
13	---	---	---	880	870	872	854	843	851	857	847	856
14	---	---	---	879	869	871	862	841	851	857	847	855
15	---	---	---	878	866	869	870	---	---	858	848	857
16	---	---	---	877	858	867	860	840	850	869	858	859
17	---	---	---	876	866	867	850	---	---	860	830	856
18	---	---	---	876	864	867	850	840	848	860	---	---
19	---	---	---	874	863	866	850	840	847	861	850	857
20	---	---	---	873	---	---	850	840	847	862	841	856
21	---	---	---	872	842	857	850	840	847	862	852	858
22	---	---	---	871	860	866	850	840	848	863	853	860
23	---	---	---	870	859	863	850	840	846	864	853	857
24	---	---	---	869	858	864	850	840	845	865	854	860
25	---	---	---	868	857	862	850	840	846	865	855	861
26	---	---	---	867	856	863	850	840	848	866	855	862
27	---	---	---	866	---	---	850	840	845	867	856	863
28	---	---	---	865	854	831	850	840	846	867	857	866
29	---	---	---	873	843	860	850	840	846	868	858	867
30	---	---	---	863	852	859	850	840	846	869	858	864
31	---	---	---	---	---	---	850	840	844	870	859	865
MONTH	---	---	---	---	---	---	871	---	---	870	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	870	860	868	862	832	850	860	880	882	900	---	---
2	870	---	---	---	851	---	890	880	883	900	---	---
3	869	858	863	---	850	---	880	880	931	900	---	---
4	868	858	866	---	850	---	890	880	885	900	---	---
5	868	857	866	870	850	856	900	890	893	900	---	---
6	867	857	866	---	850	---	900	890	893	900	---	---
7	867	856	864	860	850	858	900	---	---	900	---	---
8	866	856	864	860	850	856	900	890	891	900	---	---
9	875	855	864	900	850	857	900	880	893	900	---	---
10	865	854	863	860	---	---	900	890	893	900	---	---
11	874	854	863	---	850	---	900	890	894	900	---	---
12	863	853	862	860	850	856	900	890	896	900	880	894
13	863	852	861	---	850	---	900	890	894	900	870	893
14	872	852	859	---	---	---	900	---	---	900	890	896
15	862	851	859	890	870	877	900	---	---	900	880	895
16	861	850	855	880	870	877	890	---	---	900	890	895
17	860	850	855	890	---	851	900	890	890	900	890	897
18	860	849	855	880	---	846	900	880	890	900	890	895
19	859	839	851	890	870	879	900	890	893	910	880	896
20	858	848	851	890	870	880	900	---	---	900	880	894
21	858	847	852	890	870	881	890	---	---	910	870	895
22	867	847	853	890	870	880	900	---	---	910	870	894
23	856	826	845	890	820	880	900	---	---	910	870	896
24	856	826	845	890	---	843	900	---	---	900	---	---
25	855	825	846	890	880	882	900	890	893	900	---	---
26	864	835	849	880	880	883	900	890	895	900	---	---
27	854	824	846	890	880	882	900	890	893	900	---	---
28	863	833	852	890	860	881	900	---	---	900	---	---
29	863	833	851	890	880	881	900	---	---	900	820	---
30	---	---	---	890	870	882	900	890	888	900	---	887
31	---	---	---	890	880	882	---	---	---	910	---	---
MONTH	875	---	---	---	---	---	900	---	---	910	---	---

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	910	---	---	---	---	---	---	---	---	---	---	---
2	900	---	---	---	---	---	---	---	---	---	---	---
3	899	---	---	---	---	---	---	---	---	---	---	---
4	897	---	---	---	---	---	---	---	---	---	---	---
5	895	---	---	---	---	---	--	---	---	---	---	---
6	894	---	---	---	---	---	---	---	---	---	---	---
7	892	---	---	---	---	---	---	---	---	---	---	---
8	890	---	---	---	---	---	---	---	---	---	---	---
9	899	---	---	---	---	---	---	---	---	---	---	---
10	887	---	---	---	---	---	---	857	---	---	---	---
11	885	---	---	---	---	---	---	858	---	---	---	---
12	884	---	---	899	388	896	---	859	---	---	---	---
13	882	---	---	898	887	895	---	859	---	880	860	875
14	---	---	---	896	886	895	---	---	---	871	860	865
15	---	---	---	895	884	892	---	---	---	871	861	866
16	---	---	---	894	863	889	---	---	---	872	861	865
17	---	---	---	892	881	888	---	---	---	872	862	867
18	---	---	---	891	879	885	---	---	---	873	862	867
19	---	---	---	889	878	884	---	---	---	873	863	864
20	---	---	---	888	826	877	---	---	---	874	863	865
21	---	---	---	886	875	879	---	---	---	874	844	861
22	---	---	---	885	874	877	---	---	---	865	854	863
23	---	---	---	884	872	876	---	---	---	875	855	864
24	---	---	---	882	871	873	---	---	---	866	855	864
25	---	---	---	880	869	872	---	---	---	866	856	862
26	---	---	---	---	858	---	---	---	---	867	856	861
27	---	---	---	---	---	---	---	---	---	867	857	860
28	---	---	---	---	---	---	---	---	---	868	857	860
29	---	---	---	---	---	---	---	---	---	868	858	861
30	---	---	---	---	---	---	---	---	---	869	858	861
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

WATER TEMPERATURE, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	22.2	21.7	22.0	20.6	---	---	15.1	12.3	14.6	9.3	---	---
2	22.5	22.1	22.2	20.2	---	---	14.9	11.5	14.5	9.1	---	---
3	22.1	21.7	22.0	20.2	---	---	14.9	14.5	14.8	9.0	---	---
4	22.0	21.7	21.8	20.6	---	---	14.8	14.3	14.6	8.9	---	---
5	22.1	21.8	21.9	20.7	---	---	14.7	14.3	14.5	8.8	8.1	8.3
6	22.1	21.7	21.9	19.9	---	---	14.6	14.2	14.4	8.9	8.2	8.5
7	22.0	21.5	21.8	19.8	---	---	14.5	14.1	14.3	8.9	8.2	8.5
8	21.7	20.7	21.3	19.9	---	---	14.3	---	---	9.0	8.3	8.5
9	21.3	20.7	21.1	19.9	---	---	14.1	---	---	8.7	8.5	8.6
10	21.3	20.9	21.2	19.8	---	---	14.0	---	---	9.3	---	---
11	21.5	20.5	21.2	19.7	---	---	13.9	---	---	9.4	---	---
12	21.6	20.9	21.2	19.6	---	---	13.6	---	---	9.3	---	---
13	21.8	21.0	21.6	19.4	---	---	12.9	---	---	9.4	---	---
14	21.6	21.2	21.4	19.3	---	---	12.3	---	---	9.5	---	---
15	21.6	21.4	21.5	18.7	---	---	12.1	---	---	9.5	---	---
16	21.7	21.4	21.5	18.3	---	---	12.0	---	---	9.6	---	---
17	21.6	21.3	21.5	18.0	---	---	11.7	---	---	9.8	---	---
18	21.5	21.3	21.4	17.8	---	---	11.7	---	---	10.7	---	---
19	21.5	21.3	21.4	17.4	---	---	11.7	---	---	9.6	---	---
20	21.5	21.1	21.4	17.2	---	---	11.7	---	---	9.6	---	---
21	21.4	21.1	21.3	17.0	---	---	11.4	---	---	9.6	---	---
22	21.3	20.6	21.0	16.9	---	---	11.3	---	---	9.7	---	---
23	20.6	20.5	20.6	16.8	---	---	11.2	---	---	9.8	---	---
24	20.7	20.3	20.5	16.7	---	---	10.9	---	---	9.9	---	---
25	21.2	20.7	21.1	16.5	---	---	10.5	---	---	9.8	---	---
26	21.2	21.0	21.1	16.2	---	---	9.9	---	---	10.0	---	---
27	21.2	20.8	21.0	15.8	---	---	9.8	---	---	10.1	---	---
28	21.1	20.7	20.9	15.5	---	---	9.6	---	---	10.3	---	---
29	20.7	19.3	20.4	15.4	---	---	9.6	---	---	10.4	---	---
30	20.6	20.2	20.4	15.3	---	---	9.4	---	---	10.6	---	---
31	20.6	18.6	20.1	---	---	---	9.2	---	---	10.5	---	---
MONTH	22.5	18.6	21.3	20.7	---	---	15.1	---	---	10.7	---	---

09427520 COLORADO RIVER BELOW PARKER DAM, AZ-CA--Continued

WATER TEMPERATURE, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	10.6	---	---	11.4	---	---	16.2	15.6	15.9	18.9	---	---
2	11.3	---	---	11.7	---	---	16.3	15.9	16.1	19.1	---	---
3	10.7	9.9	10.2	12.2	---	---	16.4	16.1	16.3	19.4	---	---
4	10.3	9.7	9.9	12.0	---	---	16.5	16.1	16.3	19.4	---	---
5	10.2	9.7	9.9	12.2	---	---	17.0	16.3	16.7	19.2	---	---
6	10.3	9.6	9.9	12.5	---	---	17.4	16.9	17.1	19.4	---	---
7	10.3	9.8	10.0	13.4	---	---	17.5	13.3	17.0	19.4	---	---
8	10.6	9.9	10.2	13.5	---	---	17.5	16.6	17.1	19.7	---	---
9	10.6	10.0	10.3	13.5	---	---	17.6	17.4	17.5	20.1	---	---
10	10.7	10.2	10.5	13.4	---	---	17.7	17.3	17.5	20.4	---	---
11	10.9	10.2	10.6	13.6	---	---	17.8	17.4	17.7	21.0	---	20.1
12	11.1	10.3	10.7	13.6	---	---	18.0	17.6	17.8	21.1	20.7	20.9
13	11.3	---	---	13.7	---	---	17.9	17.5	17.7	20.7	20.1	20.5
14	11.2	---	---	13.9	---	---	18.1	15.6	17.6	20.4	20.2	20.3
15	11.3	---	---	13.7	---	---	17.9	14.0	17.1	20.7	20.2	20.5
16	11.2	---	---	14.0	---	---	17.8	14.1	17.1	20.7	20.2	20.4
17	10.9	---	---	14.2	---	---	17.8	17.5	17.7	20.5	20.1	20.3
18	10.8	---	---	14.3	---	---	17.8	17.6	17.8	21.0	20.0	20.6
19	10.8	---	---	14.5	13.9	14.1	17.9	17.6	17.8	22.5	20.9	21.6
20	10.9	---	---	14.7	14.1	14.4	18.0	---	---	22.6	22.3	22.5
21	10.8	---	---	14.7	14.3	14.5	18.2	---	---	22.8	22.2	22.6
22	11.2	---	---	14.7	14.2	14.5	18.1	---	---	22.7	22.5	22.6
23	11.2	---	---	14.7	14.0	14.5	18.1	---	---	22.5	22.1	22.3
24	11.4	---	---	15.5	11.9	14.6	18.6	---	---	22.6	---	---
25	11.7	---	---	15.6	15.2	15.4	18.6	18.3	18.5	22.6	---	---
26	12.0	---	---	15.9	15.5	15.7	19.0	18.2	18.6	22.8	---	---
27	12.2	---	---	16.1	15.7	15.9	19.0	18.5	18.8	22.5	---	---
28	11.5	---	---	16.1	15.7	15.8	18.6	---	---	22.6	22.2	22.5
29	11.4	---	---	16.0	15.5	15.7	18.8	---	---	22.6	21.7	22.2
30	---	---	---	16.0	15.7	15.9	18.9	---	---	23.3	22.6	23.0
31	---	---	---	15.9	15.6	15.8	---	---	---	23.6	---	---
MONTH	12.2	---	---	16.1	---	---	19.0	---	---	23.6	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.6	---	---	24.0	23.4	23.9	25.5	24.6	25.2	24.3	23.8	24.0
2	23.7	---	---	23.9	23.3	23.7	25.6	24.8	25.3	24.5	23.7	24.1
3	23.5	---	---	23.8	23.2	23.6	25.7	24.8	25.4	24.5	23.3	24.2
4	23.1	---	---	23.8	23.1	23.6	25.4	24.8	25.2	23.7	22.9	23.4
5	22.8	---	---	---	---	---	26.1	24.9	25.6	23.4	22.9	23.2
6	22.6	---	---	---	---	---	25.5	24.6	25.2	23.4	23.0	23.3
7	22.6	---	---	---	---	---	25.0	24.4	24.7	23.6	23.0	23.3
8	23.3	---	---	---	---	---	25.0	24.4	24.7	23.4	23.0	23.3
9	23.2	---	---	---	---	---	25.2	24.4	24.9	---	---	---
10	23.0	---	---	---	---	---	25.0	24.4	24.8	---	---	---
11	22.7	---	---	---	---	---	24.8	24.3	24.6	---	---	---
12	22.4	22.0	22.3	22.6	21.8	22.3	24.6	24.1	24.4	---	---	---
13	22.6	18.4	---	22.5	22.3	22.6	24.4	23.9	24.3	---	---	---
14	22.6	22.3	22.5	23.4	22.6	23.0	24.3	24.0	24.2	23.8	23.6	23.7
15	22.7	22.3	22.5	23.4	22.9	23.2	24.1	23.6	23.9	23.8	23.2	23.5
16	22.7	22.3	22.6	23.4	22.9	23.2	24.2	23.7	23.9	23.3	23.0	23.2
17	22.7	22.4	22.6	23.4	22.7	23.2	24.6	24.3	24.5	23.0	22.7	22.9
18	23.1	22.4	22.8	23.3	22.5	23.0	24.4	23.8	24.1	22.9	22.6	22.7
19	23.0	22.4	22.8	23.7	22.9	23.4	24.0	23.3	23.6	23.0	22.8	22.9
20	23.0	22.3	22.8	24.0	23.0	23.6	23.8	22.9	23.4	22.8	21.4	22.3
21	23.1	22.3	22.8	24.7	23.3	23.9	23.9	22.9	23.5	21.9	21.3	21.7
22	23.9	23.2	23.5	24.7	24.3	24.5	23.9	23.4	23.7	22.0	---	---
23	23.7	23.2	23.6	24.6	23.8	24.4	23.9	23.4	23.6	22.0	21.8	21.9
24	23.6	22.8	23.3	24.5	23.9	24.2	23.9	23.2	23.5	21.8	21.4	21.7
25	23.5	22.8	23.2	24.9	23.9	24.6	23.7	23.2	23.5	21.6	---	---
26	23.9	22.8	23.4	24.9	24.1	24.5	24.0	23.3	23.7	21.4	21.1	21.3
27	24.1	22.7	24.0	24.8	23.8	24.3	25.5	23.5	---	21.5	21.1	21.3
28	23.9	23.2	23.8	24.9	23.8	24.4	24.0	---	---	21.9	21.2	21.5
29	24.1	23.2	23.8	25.0	24.4	24.7	23.9	---	---	22.0	---	---
30	24.0	23.5	23.8	24.8	24.2	24.7	25.3	---	---	21.7	21.5	21.7
31	---	---	---	25.7	24.2	25.1	24.4	---	---	---	---	---
MONTH	24.1	---	---	---	---	---	26.1	---	---	---	---	---

09428500 COLORADO RIVER INDIAN RESERVATION MAIN CANAL NEAR PARKER, AZ

LOCATION.--Two gages, lat 34°10'04", long 114°16'33", in SE¼NW¼ sec.31, T.10 N., R.19 W., Gila and Salt River meridian, La Paz County, Hydrologic Unit 15030104. Forebay gage, on left wall of canal intake, 90 ft upstream from diversion gates at Arizona end of Headgate Rock Dam. Tailrace gage, on right bank of canal 250 ft downstream from gates. Both gages are on Colorado River Indian Reservation 1.7 mi northeast of Parker and 14 mi downstream from Parker Dam.

PERIOD OF RECORD.--January 1915 to current year (prior to January 1937, fiscal year diversions only; January 1937 to September 1954, monthly diversions only).

REVISED RECORDS.--WSP 1513: 1915-36.

GAGE.--Water-stage recorders above and below intake gates to record head, and recorder to show gate openings (since Oct. 1, 1972), with supplementary tape gages read daily and at time of each gate change (prior to Oct. 1, 1972, tape gages only). Datum of gages is 350.00 ft, datum in use locally, or 350.51 ft above National Geodetic Vertical Datum of 1929. Normal operating level of forebay is 364.3 ft; prior to July 9, 1962, normal operating level of forebay was 362.9 ft, datum in use locally. Prior to October 1954, discharge computed by various methods as described in WSP 1313.

REMARKS.--No estimated daily discharges. Records good. Daily diversions computed on basis of head on intake gates and gate openings. Records show water diverted to project and surface return flows to Colorado River through two wasteways and two drains; three of these are equipped with water-stage recorders.

COOPERATION.--Log of canal intake gate opening (supplementary record) furnished by Bureau of Indian Affairs.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,940 ft^3/s May 26, 1982; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	661	233	438	358	294	698	1130	977	1270	1440	1450	988
2	678	133	351	338	313	838	1020	994	1300	1440	1410	981
3	640	49	395	376	242	960	902	1030	1360	1420	1380	977
4	552	.00	488	632	269	966	977	875	1340	1430	1410	916
5	562	73	440	794	335	876	1180	1020	1380	1290	1390	869
6	603	147	303	788	329	882	1270	1070	1390	1270	1380	954
7	629	291	316	677	376	952	1250	1050	1440	1340	1340	1030
8	634	269	353	551	481	1010	1270	990	1370	1400	1240	1090
9	596	239	374	.00	490	1060	1370	1140	1320	1460	1220	1090
10	558	288	362	.00	416	1110	1170	1240	1280	1380	1320	1090
11	581	307	373	.00	537	1110	1150	1280	1280	1380	1370	1080
12	535	285	423	.00	564	1010	651	1280	1340	1430	1370	1100
13	509	338	382	.00	501	845	924	1290	1350	1400	1370	1130
14	524	361	370	.00	468	897	847	1270	1500	1430	1370	1170
15	437	326	439	.00	466	967	783	1230	1490	1460	1370	1190
16	372	352	466	.00	854	920	542	1220	1520	1500	1390	1060
17	338	398	344	.00	942	921	438	1240	1520	1480	1370	889
18	366	456	255	.00	903	876	477	1260	1540	1450	1380	841
19	510	445	218	.00	888	1050	572	1340	1480	1460	1410	899
20	620	405	194	.00	909	1010	659	1360	1450	1480	1410	938
21	564	419	261	.00	919	1010	626	1310	1390	1500	1280	856
22	424	400	284	.00	863	1070	517	1160	1370	1480	1070	883
23	474	340	286	.00	945	1110	374	1210	1390	1480	924	905
24	525	336	257	.00	937	1140	441	1310	1390	1400	305	848
25	449	356	165	.00	898	1080	645	1310	1350	1380	411	814
26	468	285	151	.00	855	990	860	1310	1350	1420	722	817
27	494	282	182	.00	692	1030	943	1320	1320	1440	811	804
28	554	311	403	.00	620	1090	1020	1320	1320	1500	835	714
29	608	332	579	245	655	1160	1030	1250	1390	1500	911	668
30	564	346	708	306	---	1200	1020	1130	1450	1470	966	766
31	428	---	572	194	---	1210	---	1240	---	1450	987	---
TOTAL	16455	8800.00	11126	5259.00	17959	31148	26058	37026	41640	44380	36572	28357
MEAN	531	293	359	170	619	1005	869	1194	1388	1432	1180	945
MAX	678	456	708	794	945	1210	1370	1360	1540	1500	1450	1190
MIN	338	.00	151	.00	242	698	374	875	1270	1270	305	668
AC-FT	32640	17450	22070	10430	35620	61780	51690	73440	82590	88030	72540	56250
(*)	21930	18270	17200	13730	16100	21150	22120	23640	21380	24760	29310	23500

CAL YR 1987 TOTAL 315616.00 MEAN 865 MAX 1500 MIN .00 AC-FT 626000 (*) 268400
WTR YR 1988 TOTAL 304780.00 MEAN 833 MAX 1540 MIN .00 AC-FT 604500 (*) 253100

(*) Return surface flow, in acre-feet, to Colorado River.

09429000 PALO VERDE CANAL NEAR BLYTHE, CA

LOCATION.--Lat 33°43'55", long 114°30'40", in NW¼NE¼ sec.19, T.5 S., R.24 E., San Bernardino meridian, Riverside County, Hydrologic Unit 15030104, at canal intake structure on west side of Palo Verde diversion dam, 10 mi northeast of Blythe and 44 mi downstream from Headgate Rock Dam.

PERIOD OF RECORD.--January 1922 to December 1923, January 1925 to current year (prior to October 1950, monthly discharge only).

REVISED RECORD.--WSP 1213: 1946-48.

GAGE.--Water-stage recorders above and below intakes to record head and, since May 18, 1964, recorder to show gate openings. Datum of gage is: Forebay gage, National Geodetic Vertical Datum of 1929; tailrace gage, 274.13 ft, NGVD. Aug. 7, 1950, to Nov. 30, 1952, water-stage recorder on tailrace and auxiliary recorder 0.5 mi downstream and Dec. 1, 1952, to Oct. 28, 1957, recording gage above and below former intake structure 0.2 mi upstream, at different datums.

REMARKS.--No estimated daily discharges. Records good. Daily diversions computed on basis of head on intake gates and gate openings. Records published herein represent flow diverted from Colorado River for irrigation. Return flows to Colorado River are measured by 10 wasteways and drains extending throughout the project; 5 of these are equipped with water stage recorder and Parshall flume, 3 are equipped with Sparling flowmeters. Return flows have not been subtracted; combined monthly return flows are given in table below.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,360 ft^3/s July 30, 1981; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1170	407	696	1000	745	1650	1500	1260	1740	1950	2150	1000
2	1360	466	677	150	703	1620	1540	1340	1700	2060	2110	989
3	1300	358	623	.00	524	1670	1280	1240	1860	1920	2170	1070
4	1060	348	597	.00	429	1580	1740	1280	1810	1850	2150	1040
5	1320	332	627	.00	402	1460	1700	1370	1700	2060	2080	1130
6	1090	322	546	.00	429	1250	1670	1370	1720	2100	1890	1190
7	1100	324	550	.00	404	1260	1570	1320	1700	2130	1750	1230
8	1100	300	520	.00	425	1310	1610	1220	1810	2140	1900	1230
9	1050	440	533	.00	474	1520	1490	1490	1670	2060	2040	1230
10	947	465	581	269	556	1610	1300	1410	1650	1930	2120	1200
11	941	485	643	273	654	1530	1340	1580	1700	2010	2050	1070
12	980	560	717	259	704	1390	1370	1690	1640	2010	1910	1240
13	931	670	634	645	789	1210	1280	1810	1780	2120	1720	1230
14	855	651	749	693	733	1300	1240	1940	1850	2160	1590	1280
15	686	657	691	748	894	1260	1060	1820	2010	2060	1830	1290
16	689	690	725	693	927	1320	827	1890	2100	2010	1770	1300
17	668	700	402	708	966	1340	639	1860	2020	1890	1780	1200
18	629	749	441	520	1200	1250	777	1920	1880	2110	1840	1060
19	676	878	432	484	1310	1220	817	1750	1690	2260	1780	1300
20	717	858	371	430	1280	1100	1000	1650	1860	2340	1760	1360
21	689	797	370	436	1200	1410	893	1540	1950	2230	1520	1370
22	676	762	359	584	1270	1380	896	1420	2010	2190	1410	1370
23	623	801	434	627	1280	1370	794	1540	1940	2130	1350	1280
24	628	809	399	601	1370	1480	744	1680	2070	1980	1000	1100
25	653	868	356	718	1430	1520	816	1770	2110	2020	876	899
26	785	668	534	739	1460	1550	996	1800	1780	2050	841	1220
27	827	653	624	857	1460	1310	1240	1750	2180	2220	948	1360
28	792	648	787	805	1520	1600	1300	1700	1860	2270	886	1100
29	761	613	981	924	1500	1590	1270	1650	1900	2250	918	880
30	737	657	1250	865	---	1540	1310	1650	1920	2090	986	970
31	634	---	1330	716	---	1520	---	1730	---	2150	1040	---
TOTAL	27074	17336	19179	14744.00	27038	44120	36009	49440	55610	64760	50165	35188
MEAN	873	598	619	476	932	1423	1200	1595	1854	2089	1618	1173
MAX	1360	878	1330	1000	1520	1670	1740	1940	2180	2340	2170	1370
MIN	623	300	356	.00	402	1100	639	1220	1640	1850	841	880
AC-FT	53700	35580	38040	29240	53630	87510	71420	98060	110300	128500	99500	69800
(*)	38770	34670	33220	28250	29470	34520	36400	37630	41470	44730	48600	42480

CAL YR 1987 TOTAL 435888.00 MEAN 1194 MAX 2010 MIN .00 AC-FT 864600 (*) 444400
WTR YR 1988 TOTAL 441263.00 MEAN 1206 MAX 2340 MIN .00 AC-FT 875200 (*) 450200

(*) Return flows, in acre-feet, to Colorado River.

09429010 COLORADO RIVER AT PALO VERDE DAM, AZ-CA

LOCATION.--Lat 33°43'55", long 114°30'40", in NW¼NE¼ sec.19, T.5 S., R.24 E., San Bernardino meridian, in California, Riverside County, Hydrologic Unit 15030104, on west side of Palo Verde Diversion Dam, 10 mi northeast of Blythe, CA., and 44 mi downstream from Headgate Rock Dam.

DRAINAGE AREA.--186,200 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--April 1969 to current year. If records for the two Colorado River Indian Reservation drains entering below Palo Verde Dam are added to records for this station, records equivalent to those published 1956-69 as "Colorado River below Palo Verde Dam" can be obtained.

GAGE.--Water-stage recorder, to record water stage in tailrace. Supplementary water-stage recorder operated by Geological Survey and Palo Verde Irrigiation District. Datum of gage is National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharge. Records fair. Many diversions above station for irrigation, municipal, and industrial uses. Flow regulated by Lake Mead, Lake Mohave, and Lake Havasu.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 42,300 ft^3/s June 30, 1983; minimum daily, 1,060 ft^3/s Nov. 25, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 14,000 ft^3/s Jan. 9; minimum daily, 3,060 ft^3/s Nov. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8570	4860	6060	6480	7270	8810	9950	9510	8080	8200	11900	8030
2	7680	4030	4490	8130	6950	7110	11600	9860	7370	8950	12000	6830
3	9200	4320	5990	7430	7980	5940	11700	9990	5790	9430	11900	7190
4	9710	3440	5360	8670	8280	5080	11100	9940	9040	10400	10500	9050
5	9530	3060	6230	9250	8350	7430	10500	9220	9170	10000	9500	8780
6	9140	3530	7110	11700	7430	7800	10800	7190	8860	9930	10500	7790
7	9250	3850	7110	12300	7270	8580	10800	9730	8910	9010	11100	7820
8	8770	4520	5380	12900	7470	8770	9790	9680	8150	8820	11900	7500
9	7610	5740	6080	14000	7740	8320	9900	10100	8760	10600	12000	6600
10	8560	4950	6110	11100	7690	7780	11000	10300	7250	11500	12100	7510
11	9260	4150	6190	13000	7710	6660	10900	9590	8210	11700	10600	7590
12	6010	3880	6210	12800	7710	8420	11000	9060	9450	11600	10500	8770
13	7670	3780	6190	12000	7250	9910	10600	7100	9140	11500	10900	8260
14	7490	3810	5970	11700	7700	10200	8660	7120	10700	9480	11500	7780
15	8480	4310	5950	11400	7500	10100	9460	8600	8970	10400	11600	7410
16	6650	4870	5820	10400	7370	10600	7120	10400	8800	10500	10900	6470
17	7180	5090	6320	9720	6870	10200	7960	10100	8930	10300	10800	6860
18	8060	5170	6480	9720	6460	8100	8350	9440	10100	12000	10800	7070
19	8090	4500	6470	10000	6390	10700	8540	9090	10300	12000	9820	8100
20	7770	4050	6520	10000	6700	11400	7210	8110	10400	11900	10100	7990
21	7760	5410	6410	9250	7050	10700	5770	10000	10200	9690	11100	8090
22	7410	4490	6390	8530	7540	10500	4710	9600	8980	9880	9870	7630
23	7200	4180	6430	8390	8800	10900	7790	8780	8010	10600	10000	6570
24	7190	4060	6420	8360	7150	10000	8710	8520	7780	10800	10300	7010
25	7420	4380	7700	8110	6890	8630	8750	8300	8720	11100	8090	8510
26	7670	4120	5280	8080	5940	11400	10500	7890	9500	11400	6790	8250
27	7590	4230	6200	7850	7780	13200	9380	6800	10400	11100	8560	7390
28	7980	5350	6200	7830	7830	13100	8910	8800	10900	9150	9150	7820
29	7170	4790	5680	7710	8420	11000	6060	10600	10100	10000	9020	7160
30	5680	5410	5650	7340	---	10400	8640	9910	8950	11300	7990	6480
31	6380	---	5700	7580	---	9470	---	9360	---	12300	7880	---
TOTAL	244130	132330	190100	301730	215490	291210	276160	282690	269920	325540	319670	228310
MEAN	7875	4411	6132	9733	7431	9394	9205	9119	8997	10500	10310	7610
MAX	9710	5740	7700	14000	8800	13200	11700	10600	10900	12300	12100	9050
MIN	5680	3060	4490	6480	5940	5080	4710	6800	5790	8200	6790	6470
AC-FT	484200	262500	377100	598500	427400	577600	547800	560700	535400	645700	634100	452900

CAL YR 1987 TOTAL 3978700 MEAN 10900 MAX 21400 MIN 3060 AC-FT 7892000
WTR YR 1988 TOTAL 3077280 MEAN 8408 MAX 14000 MIN 3060 AC-FT 6104000

09429280. CIBOLA LAKE INLET NEAR CIBOLA, AZ.

LOCATION.--Lat 33°15'11", long 114°40'05", in SW¼NE¼ sec.18, T.2 S., R.23 W., La Paz County, Hydrologic Unit 15030104, in Cibola National Wildlife Refuge, below levee on left bank Colorado River at north end of Cibola Lake, 4.4 mi south of Cibola.

PERIOD OF RECORD.--December 1974 to current year (monthly discharge only).

GAGE.--None. Prior to July 30, 1982, two water-stage recorders; one recorded stage and the other recorded deflection-meter readings from deflection vane located in concrete flume. On Feb. 1, 1988, Cibola National Wildlife Refuge installed a pump at the inlet to pump water into Cibola Lake when the river water surface is lower than Lake elevation.

REMARKS.--No estimated record. Records good. Record shows amount of water diverted or pumped from Colorado River to Cibola Lake. Record of water pumped into Cibola Lake furnished by Cibola National Wildlife Refuge.

09429290. CIBOLA LAKE OUTLET NEAR CIBOLA, AZ.

LOCATION.--Lat 33°13'19", long 114°40'16", in NW¼SE¼ sec.30, T.2 S., R.23 W., La Paz County, Hydrologic Unit 15030104, in Cibola National Wildlife Refuge, at south end of Cibola Lake outlet to Colorado River, 6.5 mi south of Cibola.

PERIOD OF RECORD.--December 1974 to current year (monthly discharge only).

GAGE.--None. Prior to Oct. 1, 1987, water-state recorder and cipolletti weir or stop logs in 6-ft concrete flume. Datum of gage was 204.17 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated record. Records good. Record shows amount of water returned to Colorado River through controlled outlet. In water years 1976, 1977, and 1979 part of the return flow included in the record was from local runoff.

MONTHLY DISCHARGE, IN ACRE-FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Month	Cibola Lake Inlet 09429280	Cibola Lake Outlet 09429290
October	0	0
November	0	0
December	0	0
CAL YR 1987	0	0
January	0	0
February	0	0
March	22	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
WTR YR 1988	22	0

09429300 COLORADO RIVER BELOW CIBOLA VALLEY, AZ

LOCATION.--Lat 33°13'16", long 114°40'18", in NE¼SW¼ sec.30, T.2 S., R.23 W., Gila and Salt River meridian, La Paz County, Hydrologic Unit 15030104, on left bank 6.7 mi south of Cibola, 38 mi upstream from Imperial Dam, 39.7 mi downstream from Ehrenberg, AZ., 52.1 mi downstream from Palo Verde diversion dam near Blythe, CA, and at mile 620 on Colorado River Profile Survey map.

DRAINAGE AREA.--187,800 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--April 1956 to September 1988 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 200.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lakes Mead, Mohave, and Havasu. Many diversions above station for irrigation, municipal, and industrial uses. See sta 09429000 for return flows from Palo Verde Irrigation District, which enter between sta 09429010 and this station. A portion of the return flows from Colorado River Indian Reservation also enters between these two stations.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,700 ft^3/s Aug. 18, 1983, gage height, 16.57 ft; minimum daily discharge, 1,900 ft^3/s Jan. 18, 1974; minimum gage height, about 4.1 ft, Jan. 18, 1974, based on minimum observed gage height of 4.25 ft Jan. 14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 14,000 ft^3/s Mar. 28; minimum daily, 4,810 ft^3/s Nov. 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10100	7410	6890	8810	7820	9510	10300	10000	10100	10400	13400	9110
2	9110	6380	6970	10000	7520	9450	11300	10200	9140	10000	13000	8730
3	9130	5760	6040	11300	7590	8120	12400	10700	8090	10700	13100	7900
4	10400	5570	6590	10900	8470	7270	12600	10700	7520	11100	13000	8810
5	10800	5140	6410	10700	8320	7190	11900	10700	10000	12100	11500	9760
6	10500	4810	7310	11300	8570	8830	11500	9160	10300	11500	11000	9550
7	10300	5240	7850	12100	8010	9170	12000	8870	10200	11300	11600	9060
8	10300	5900	7800	12200	7920	9760	11500	10600	10600	10300	12400	8900
9	9270	6280	7790	12400	8370	9690	11100	10500	9940	10600	13000	8140
10	9130	6800	8340	12400	8500	9400	11300	11000	9670	12000	12900	7930
11	9760	6360	8380	9480	8430	8750	12000	11000	8880	12800	13100	8420
12	10200	5820	8320	10400	8500	8400	12000	10300	10000	12900	11400	8230
13	7610	5720	8430	10400	8510	9760	11900	9280	11000	12800	11800	9430
14	8590	5620	8500	10100	8260	10900	12100	8080	10800	12700	12000	8840
15	8600	5590	8460	10100	8470	11200	10300	8830	12000	10600	12200	8330
16	9220	6080	8530	9930	8280	11100	10800	9460	10700	12000	12500	8000
17	7620	6440	8650	9030	8190	11400	9320	11600	10200	12000	12100	7930
18	8360	6590	9100	8820	7840	10100	9610	11900	10900	12300	12200	8640
19	9090	6530	9180	8800	7540	9890	9950	10500	11800	13400	11600	8570
20	8970	5960	9230	9130	7640	11800	9860	9620	11900	13200	11400	9000
21	8920	5700	9240	9110	7960	12100	9390	9940	12000	13200	11600	8710
22	8760	7030	9230	8400	8130	11500	7700	11200	11800	11100	12600	8840
23	8300	6000	9270	7960	8860	11400	7740	10400	10600	11800	12000	8080
24	8210	5830	9220	7900	9460	11800	9580	10200	9450	11900	11400	7850
25	8110	5860	9310	7920	8320	10500	10000	9520	9540	12000	10900	8390
26	8600	5900	10400	7760	8030	10400	10800	9220	10500	12500	9200	8770
27	8650	5810	8360	7810	7830	12400	11500	8240	11100	12700	8860	9150
28	8700	5950	9210	7760	9090	14000	10800	8320	12100	12300	9950	8290
29	9030	6850	9120	7820	9080	13700	9760	9650	12500	10300	10200	8770
30	7990	6380	8630	7740	---	11900	8860	11300	11700	11700	10100	7450
31	7020	---	8700	7610	---	11500	---	10800	---	12500	9310	---
TOTAL	279350	181310	259460	296090	239530	322890	319870	311090	314430	366700	360320	257580
MEAN	9011	6044	8370	9551	8260	10420	10660	10040	10480	11830	11620	8586
MAX	10800	7410	10400	12400	9460	14000	12600	11800	12500	13400	13400	9760
MIN	7020	4810	6040	7610	7520	7190	7700	8080	7520	10000	8860	7450
AC-FT	554100	359600	514600	587300	475100	640500	634500	617000	623700	727300	714700	510900

CAL YR 1987 TOTAL 4367360 MEAN 11970 MAX 21500 MIN 4810 AC-FT 8663000
WTR YR 1988 TOTAL 3508620 MEAN 9586 MAX 14000 MIN 4810 AC-FT 6959000

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA

(National stream-quality accounting network, radiochemical, and tritium network station)

LOCATION.--Lat 32°52′59″, long 114°27′55″, at Imperial Dam. The Arizona end of the dam is in SW¼NW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian, Yuma County, Hydrologic Unit 15030104; the California end is in NW¼SW¼ sec.9, T.15 S., R.24 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030104. Imperial Dam is 5 mi upstream from Laguna Dam, 15 mi northeast of Yuma, Az., 90 mi downstream from Palo Verde Dam, and 147 mi downstream from Parker Dam.

DRAINAGE AREA.--188,500 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--1903-34 (yearly discharge only, published in WSP 1313), July 1934 to current year (monthly discharge only October 1942 to September 1979). Prior to October 1942 published as "near Picacho, Ca." October 1942 to September 1971 published as "at Imperial Dam" (monthly discharge shown as "flow reaching Imperial Dam," listed as supplement to "flow passing Imperial Dam").

GAGE.--None. This record is synthesized from records of several other stations (see REMARKS). July 13, 1934, to Sept. 30, 1942, water-stage recorder at site 14.5 mi upstream at datum 167.38 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records show flow of Colorado River reaching Imperial Dam, and are based on combined daily total flow of Colorado River below Imperial Dam (sta 09429500), All-American Canal near Imperial Dam (sta 09523000), Gila Gravity Main Canal at Imperial Dam (sta 09522500), and diversions to Mittry Lake (sta 09522400). Records for 1903-34 and for October 1942 to September 1960 were computed as combined flow of Colorado River at Yuma (sta 09521000) and the canals diverting at Imperial and Laguna Dams, less the flow of Gila River near Dome (sta 09520500); for some of these periods drainage and waste return flows and channel losses between the gaging stations and Imperial Dam were considered, and for other periods they were neglected. Records for October 1960 to September 1979 are based on combined monthly total flow of same stations on which daily flows are currently based. Records for July 1934 to September 1942 show daily discharge of Colorado River at gaging station near Picacho, Ca., water withdrawals, and diversions for irrigation, municipal, and industrial uses, and return flows from irrigated areas. Diversions to Mittry Lake, which began June 23, 1970, are included in river records in table below. Additional regulation, beginning Jan. 31, 1966, to equalize supplies for downstream water users, is provided by pumped storage in reservoir on Senator Wash, about 2 mi upstream from Imperial Dam. Monthend contents of Senator Wash Reservoir - capacity, 13,840 acre-ft - is given in table below.

COOPERATION.--Records of Sparling meter readings of diversion to Mittry Lake and contents of Senator Wash Reservoir furnished by Bureau of Reclamation.

EXTREMES FOR PERIOD OF 1934-88.--Maximum discharge, 40,800 ft^3/s Sept. 5, 1939; minimum, 536 ft^3/s Aug. 3, 1934; minimum daily since regulation of Hoover Dam began, 1,450 ft^3/s Feb. 17, 1935.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10600	7170	6770	8540	7940	8770	12000	9960	10800	11400	12300	8900
2	10600	7530	7180	9080	7630	9420	11000	10500	10100	10600	12300	8490
3	9380	5650	7840	10400	7590	8940	10100	10500	9510	9860	12400	7800
4	9330	5900	6660	11900	7520	8010	11600	10700	8800	10300	12800	7380
5	10500	5790	6710	10800	8180	7490	12700	11200	8110	11000	12500	8380
6	10800	4850	6600	10600	8380	6640	12500	10600	9300	11800	11000	9270
7	10800	4570	8320	11300	8400	8070	12500	9130	9540	11800	10800	9150
8	10500	5150	7800	12200	8240	8740	12000	8060	9700	11700	11500	8830
9	10000	6170	8320	12100	7920	9460	11500	10000	9970	10400	12200	8650
10	9140	6300	8090	12300	7970	9920	11100	10700	9710	10200	12700	7990
11	8500	6910	8530	12400	8550	9160	11600	10900	9310	11100	13000	7570
12	9010	6760	8900	9680	8570	8860	12300	11100	9010	11600	12900	8150
13	10100	6000	8810	10700	8170	8990	12200	10700	10400	12400	11500	8410
14	7450	5600	8680	10400	8250	10300	12200	9920	10500	12500	11300	9170
15	8340	5410	8560	10300	8330	11200	11500	9040	10900	12600	11900	8870
16	8410	5850	8740	10300	8340	11500	10100	9190	11000	11400	12000	8310
17	9090	6300	9160	10100	8490	11400	10900	9650	11100	11100	12600	7730
18	7390	6430	9160	9610	8410	10800	9460	10200	9900	12100	12400	7590
19	8470	6320	9260	8840	8040	10200	10100	10200	9470	12100	12000	8480
20	9140	6110	9420	9060	7360	9700	10300	10500	11000	12200	12200	8580
21	9130	5780	9470	9450	6920	10600	9770	9390	11200	12800	11700	8960
22	8990	5430	9670	9360	7940	11900	9410	8900	11000	12400	11600	8750
23	8420	6390	9550	8500	8100	11800	8380	10100	11500	11200	12300	8700
24	7570	6710	9580	8130	8560	12600	7590	9960	10600	10400	11300	7940
25	7890	6580	9190	8330	9310	11900	9500	10100	9950	11300	11300	7690
26	8520	5800	9760	8020	7860	11600	10100	9830	9290	12100	10700	8530
27	8680	5980	10300	7630	7410	10500	11000	9260	10400	12400	8590	8620
28	8870	6190	9260	8270	7480	11900	11600	8160	10700	12600	9990	9130
29	8990	5860	9150	7560	9310	12800	11000	8040	11200	12700	11100	8480
30	9290	6370	9210	8160	---	12900	10200	8740	12100	11200	10100	8620
31	8340	---	9110	7440	---	13100	---	10100	---	11000	9730	---
TOTAL	282240	181860	267760	301460	235170	319370	326210	305330	306080	358260	360710	253120
MEAN	9105	6062	8637	9725	8109	10300	10870	9849	10200	11560	11640	8437
MAX	10800	7530	10300	12400	9310	13100	12700	11200	12100	12800	13000	9270
MIN	7390	4570	6600	7440	6920	6640	7590	8040	8110	9860	8590	7380
AC-FT	559800	360700	531100	597900	466500	633500	647000	605600	607100	710600	715500	502100
(*)	7660	6751	6693	6985	6836	5273	7070	8914	7050	5515	3127	3129
(**)	799	595	676	609	495	566	574	546	899	922	922	893

CAL YR 1987 TOTAL 4392090 MEAN 12030 MAX 21500 MIN 4570 AC-FT 8712000 (**) 9290
WTR YR 1988 TOTAL 3497570 MEAN 9556 MAX 13100 MIN 4570 AC-FT 6937000 (**) 8500

(*) Monthend contents, in acre-feet, in Senator Wash Reservoir.
(**) Diversions, in acre-feet, to Mittry Lake (09522400).

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

WATER-QUALITY RECORDS

LOCATION.--Water samples collected above trash racks at All-American Canal headworks at west end of Imperial Dam.

PERIOD OF RECORD.--August 1969 to current year.
Prior to October 1971, published as sta 09429500, Colorado River at Imperial Dam, Ariz.-Calif.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to current year.
WATER TEMPERATURES: October 1974 to current year.

REMARKS.--Replaces water-quality station 09525500 Yuma Main Canal below Colorado River Siphon, at Yuma, Ariz. Stream discharges reported with analyses represent total flow reaching Imperial Dam.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum observed, 1,970 microsiemens Aug. 23, 1977; minimum observed, 666 microsiemens Sept. 12, 1986.
WATER TEMPERATURES: Maximum observed, 33.0°C Aug. 20, 1977, Aug. 28, 29, 1981; minimum recorded, 7.5°C Dec. 31, 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 1,300 microsiemens Nov. 7; minimum recorded, 870 microsiemens Jan. 9.
WATER TEMPERATURES: Maximum recorded, 30.8°C Aug. 28; minimum recorded, 8.6°C Jan. 22.

INSTRUMENTATION.--Specific conductance and water temperature recorder October 1982 to current year.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV 1987											
17...	1105	6410	1050	8.10	18.5	17.5	4.1	767	9.8	102	K14
JAN 1988											
20...	1205	8790	1080	8.05	9.0	14.5	2.8	775	11.4	110	K15
MAR											
16...	1000	11600	1060	8.10	20.5	15.0	4.3	767	9.9	98	K10
MAY											
18...	1300	9830	960	8.05	32.5	23.0	3.4	762	8.3	97	20
JUL											
20...	0915	12100	1000	8.15	33.5	28.5	4.4	765	7.3	94	20
SEP											
01...	1330	8620	1150	8.00	42.0	30.5	7.0	760	7.3	98	40

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
NOV 1987											
17...	K6	310	160	76	28	100	3	4.0	177	0	145
JAN 1988											
20...	28	310	160	77	28	100	3	4.4	177	0	145
MAR											
16...	K8	300	160	75	28	100	3	4.1	176	0	144
MAY											
18...	39	290	150	71	27	89	2	3.3	171	0	140
JUL											
20...	44	300	130	73	28	94	2	3.8	168	0	138
SEP											
01...	40	320	170	79	30	120	3	4.1	185	0	152

K Based on non-ideal colony count.

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

WATER QUALITY DATA

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
NOV 1987										
17...	280	86	0.40	12	682	676	0.93	--	<0.010	0.120
JAN 1988										
20...	270	88	0.40	10	689	667	0.94	--	<0.010	0.220
MAR										
16...	260	83	0.40	10	663	648	0.90	--	<0.010	0.220
MAY										
18...	250	74	0.40	9.0	614	610	0.84	--	<0.010	0.200
JUL										
20...	250	80	0.40	9.8	638	626	0.87	0.190	0.010	0.200
SEP										
01...	280	110	0.40	11	731	726	0.99	--	<0.010	0.150

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P) (00673)
NOV 1987										
17...	0.020	0.010	0.18	0.20	0.010	<0.010	<0.010	--	0.01	--
JAN 1988										
20...	0.020	0.030	0.18	0.20	0.020	<0.010	<0.010	--	0.02	--
MAR										
16...	0.020	<0.010	0.18	0.20	0.020	<0.010	<0.010	--	0.02	--
MAY										
18...	<0.010	0.020	--	0.30	0.020	<0.010	<0.010	--	0.02	--
JUL										
20...	<0.010	<0.010	--	0.30	0.010	<0.010	0.020	0.06	0.01	--
SEP										
01...	<0.010	0.040	--	0.20	0.030	0.010	<0.010	--	0.03	0.01

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
NOV 1987										
17...	<10	2	92	<0.5	<1	<1	<3	<1	<3	<5
JAN 1988										
20...	--	--	--	--	--	--	--	--	--	--
MAR										
16...	<10	2	95	<0.5	<1	<1	<3	1	<3	<5
MAY										
18...	<10	2	89	<0.5	<1	<1	<3	1	3	<5
JUL										
20...	<10	2	95	<0.5	<1	<1	<3	1	4	<5
SEP										
01...	--	--	--	--	--	--	--	--	--	--

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 1987										
17...	43	3	<0.1	<10	<1	2	<1.0	1000	<6	<3
JAN 1988										
20...	--	--	--	--	--	--	--	--	--	--
MAR										
16...	49	4	<0.1	<10	<1	2	<1.0	1000	<6	<3
MAY										
18...	44	3	<0.1	<10	<1	2	<1.0	980	<6	5
JUL										
20...	43	2	<0.1	<10	3	3	1.0	990	<6	7
SEP										
01...	--	--	--	--	--	--	--	--	--	--

< Actual value is known to be less than value shown.

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1020	950	979	---	---	---	1180	1030	1100	1090	916	984
2	1020	950	991	---	---	---	1150	1020	1070	1050	903	966
3	1070	970	1030	---	---	---	1140	1010	1070	1000	871	931
4	1060	970	1020	1140	---	1040	1150	1060	1110	1010	871	925
5	1020	940	981	1230	1110	1150	1140	1040	1090	1000	891	942
6	1010	940	973	1230	1200	1220	1140	1040	1080	994	893	934
7	---	---	---	1300	1230	1270	1130	928	1060	986	876	919
8	---	---	---	1290	1220	1250	1130	977	1040	997	878	922
9	---	---	---	1270	1170	1200	1110	966	1030	1010	870	924
10	---	---	---	1200	1080	1130	1140	973	1050	1000	872	923
11	---	---	---	1160	1030	1090	1130	961	1030	1000	882	959
12	---	---	---	1130	1030	1090	1120	960	1020	1070	906	993
13	---	---	---	1180	1060	1110	1130	950	1030	1090	906	963
14	---	---	---	1220	1080	1130	1130	966	1040	1110	918	980
15	---	---	---	1210	1110	1150	1120	956	1020	1110	920	981
16	---	---	---	1240	1060	1140	1130	953	1030	1100	923	985
17	---	---	---	1220	1020	1130	1100	941	1010	1080	925	979
18	---	---	---	1200	1040	1110	1120	939	1020	1080	925	994
19	---	---	---	1200	1020	1100	1080	927	991	1110	939	1010
20	---	---	---	1170	1030	1100	1080	926	987	---	939	1010
21	---	---	---	1230	1040	1110	1080	924	990	1070	939	987
22	---	---	---	1240	1100	1150	1080	922	987	1080	938	992
23	---	---	---	1210	1020	1100	1090	920	991	1110	938	1010
24	---	---	---	1200	1020	1120	1090	908	987	1130	947	1020
25	---	---	---	1240	1070	1140	1080	917	980	1130	966	1030
26	---	---	---	1240	1100	1150	1090	915	978	1110	945	1020
27	---	---	---	1200	1060	1130	1000	913	949	1110	944	1020
28	---	---	---	1200	1090	1140	1110	931	1020	1120	954	1020
29	---	---	---	1180	1080	1120	1050	910	971	1110	943	1010
30	---	---	---	1190	1020	1090	1060	918	971	1090	942	1010
31	---	---	---	---	---	---	1090	918	987	1110	941	1020
MONTH	---	---	---	---	---	---	1180	908	1020	---	870	979
		FEBRUARY			MARCH			APRIL			MAY	
1	1110	940	1010	1080	900	973	1060	930	986	1180	995	1080
2	1100	940	1010	1070	900	964	1080	950	1020	1110	950	1020
3	1110	939	1010	1030	910	962	1040	920	972	1140	939	1020
4	1100	948	1010	1040	930	998	1020	920	962	1110	928	993
5	1010	917	960	1080	950	1020	1030	930	974	1140	947	1010
6	1030	917	974	1120	980	1030	1060	940	988	1140	936	1010
7	1040	916	982	1040	910	969	1070	940	994	1200	956	1080
8	1010	945	983	1070	900	982	1030	920	970	1240	964	1070
9	1000	955	983	1040	890	960	1060	960	1010	1140	924	1010
10	984	943	968	1050	910	968	1060	940	994	1150	943	1020
11	1000	943	972	1060	890	974	1070	890	987	1140	932	1010
12	1000	943	971	1070	910	989	1050	910	974	1150	941	1020
13	1010	941	973	1070	920	995	1080	930	992	1170	950	1040
14	1020	941	980	1030	900	961	1050	940	991	1120	1020	1080
15	1050	910	992	1010	900	947	1050	930	987	1120	1050	1090
16	1030	910	970	1010	890	937	1110	950	1030	1140	957	1050
17	1030	919	974	1030	890	948	1060	950	1010	1160	946	1040
18	1070	909	992	1020	880	935	1120	980	1040	1010	906	955
19	1090	928	1010	1020	890	971	1080	980	1030	1130	925	1020
20	1100	947	1020	1030	900	965	1080	970	1020	1130	934	1030
21	1080	936	1000	980	890	925	1070	980	1020	1140	944	1050
22	1050	945	992	1010	880	935	1110	980	1040	1130	932	1020
23	1040	915	980	1020	890	947	1160	1010	1090	1080	912	981
24	1010	904	954	1010	890	943	1210	1000	1100	1120	931	1020
25	1000	894	944	1010	890	938	1090	960	1020	1120	941	1020
26	1050	922	986	1060	940	990	1080	950	1010	1220	961	1060
27	1060	922	992	1040	880	940	1070	930	988	1210	954	1060
28	1100	931	1000	980	890	922	1070	930	990	1260	954	1110
29	1060	900	969	960	900	925	1100	944	1010	1260	977	1090
30	---	---	---	980	900	938	1120	946	1040	1170	939	1030
31	---	---	---	1050	940	992	---	---	---	1090	929	998
MONTH	1110	894	985	1120	880	963	1210	890	1010	1260	906	1040

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1150	940	1040	1140	980	1050	1060	960	1010	1170	990	1080
2	1190	981	1060	1200	1010	1090	1050	960	1010	1190	1000	1090
3	1240	991	1100	1170	1010	1080	1080	979	1020	1160	1000	1090
4	1200	1010	1100	1170	980	1060	1070	979	1020	1170	1070	1120
5	1280	1030	1150	1140	980	1050	1080	979	1020	1100	1000	1070
6	1160	962	1040	1100	970	1030	1140	998	1070	1060	1000	1030
7	1190	962	1050	1140	980	1050	1140	978	1060	1080	1020	1040
8	1180	963	1050	1130	990	1050	1110	978	1030	1090	997	1050
9	1180	973	1060	1150	1020	1080	1080	957	1020	1130	998	1060
10	1150	953	1050	1150	980	1060	1070	967	1010	1160	1010	1090
11	1180	974	1070	1080	970	1020	1080	967	1020	1170	1020	1090
12	1190	994	1080	1060	970	1010	1050	966	1000	1130	1010	1070
13	1140	974	1040	1050	960	1010	1130	976	1050	1130	1010	1070
14	1130	955	1030	1060	960	1010	1100	966	1030	1070	963	1020
15	1170	945	1050	1070	980	1030	1100	965	1020	1100	994	1050
16	1100	955	1020	1140	1000	1070	1040	975	1010	1140	995	1070
17	1150	966	1050	1050	990	1020	1020	975	1010	1160	1020	1090
18	1200	996	1080	1070	990	1020	1040	1000	1030	1160	1030	1090
19	1130	966	1030	1080	970	1020	1040	1010	1020	1120	999	1060
20	1130	957	1030	1030	970	996	1060	1030	1050	1130	999	1070
21	1130	957	1030	1050	950	1010	1040	993	1020	1120	999	1060
22	1110	957	1020	1050	940	1010	1050	973	1020	1140	999	1070
23	1120	968	1040	1140	980	1060	1050	953	997	1130	998	1060
24	1180	998	1080	1090	960	1020	1080	952	1030	1170	998	1090
25	1190	1040	1100	1100	950	1020	1090	962	1020	1190	1050	1100
26	1200	1010	1090	1100	970	1030	1100	982	1040	1150	1000	1080
27	1160	979	1060	1050	960	1000	1170	1020	1100	1110	1000	1060
28	1130	969	1040	1050	960	1000	1230	931	1100	1090	994	1040
29	1100	960	1020	1080	970	1020	1110	---	1020	1140	1000	1080
30	1090	970	1030	1130	1010	1060	1150	970	1050	1100	992	1050
31	---	---	---	1060	950	1000	1140	980	1050	---	---	---
MONTH	1280	940	1060	1200	940	1030	1230	---	1030	1190	963	1070

WATER TEMPERATURE, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	26.1	25.7	26.0	---	---	---	15.4	14.8	15.2	10.4	9.9	10.2
2	26.2	25.9	26.1	---	---	---	15.4	14.9	15.2	10.0	9.7	9.8
3	26.6	25.9	26.2	---	---	---	15.8	15.2	15.5	9.8	9.5	9.7
4	25.9	25.3	25.6	20.8	20.4	20.7	15.6	15.3	15.4	10.1	9.6	9.8
5	25.3	24.9	25.2	21.2	20.7	20.9	15.8	15.0	15.4	10.3	10.0	10.2
6	25.3	24.8	25.1	21.2	20.7	20.9	16.0	15.3	15.6	10.7	10.1	10.4
7	---	---	---	21.0	20.3	20.8	16.3	15.7	16.0	10.8	10.5	10.7
8	---	---	---	20.6	20.3	20.5	16.0	15.4	15.7	10.7	10.4	10.6
9	---	---	---	20.3	19.9	20.2	15.6	15.0	15.3	10.8	10.5	10.7
10	---	---	---	20.3	19.8	20.1	15.3	14.7	15.0	11.0	10.6	10.8
11	---	---	---	20.1	19.6	19.9	15.5	14.9	15.1	11.4	10.8	11.1
12	---	---	---	20.3	19.5	19.9	15.0	13.9	14.7	11.4	10.9	11.2
13	---	---	---	20.2	19.9	20.1	13.9	12.0	13.0	11.1	10.4	10.8
14	---	---	---	19.9	19.4	19.7	11.9	10.5	11.1	10.5	10.2	10.3
15	---	---	---	19.3	17.8	18.6	10.5	9.6	10.1	10.5	9.9	10.3
16	---	---	---	17.8	16.7	17.3	10.6	9.5	10.0	10.9	10.1	10.5
17	---	---	---	17.4	16.5	16.9	11.7	10.7	11.2	11.3	10.9	11.1
18	---	---	---	17.4	16.5	16.8	12.6	11.7	12.0	11.6	11.1	11.3
19	---	---	---	17.1	16.7	16.9	12.7	12.5	12.6	11.1	9.9	10.7
20	---	---	---	16.9	16.4	16.6	12.9	12.4	12.6	10.0	9.3	9.7
21	---	---	---	16.9	16.2	16.6	12.9	12.6	12.9	9.4	8.8	9.2
22	---	---	---	17.1	16.6	16.9	12.9	12.5	12.7	8.9	8.6	8.8
23	---	---	---	17.1	16.7	16.9	13.0	12.5	12.7	9.7	8.8	9.2
24	---	---	---	17.0	16.5	16.8	12.5	11.9	12.2	10.4	9.4	9.8
25	---	---	---	16.9	16.2	16.6	11.8	10.3	11.0	10.8	9.9	10.3
26	---	---	---	16.2	15.2	15.8	10.3	9.8	10.1	11.1	10.3	10.6
27	---	---	---	15.2	14.9	15.1	9.8	9.3	9.5	11.2	10.5	10.8
28	---	---	---	15.1	14.7	14.9	9.8	9.3	9.6	11.7	10.5	11.1
29	---	---	---	15.1	14.6	14.9	10.3	9.7	10	12.7	11.4	12.1
30	---	---	---	15.5	14.9	15.2	10.7	10.2	10.4	13.3	12.2	12.7
31	---	---	---	---	---	---	10.8	10.3	10.6	13.2	12.3	12.7
MONTH	---	---	---	---	---	---	16.3	9.3	12.8	13.3	8.6	10.6

09429490 COLORADO RIVER ABOVE IMPERIAL DAM, AZ-CA--Continued

WATER TEMPERATURE, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	13.2	12.3	12.6	17.4	16.7	17.0	17.2	16.5	16.8	20.0	18.6	19.3
2	12.9	12.1	12.6	16.8	16.0	16.6	17.6	17.0	17.3	18.5	17.9	18.2
3	12.5	11.9	12.2	16.9	16.2	16.5	18.2	17.6	17.9	18.8	17.8	18.3
4	12.6	12.0	12.2	17.4	16.6	17.0	18.7	18.1	18.4	19.8	18.8	19.3
5	12.3	11.6	11.9	18.3	16.8	17.6	19.2	18.5	18.8	20.3	19.4	19.9
6	12.5	11.6	11.9	18.6	17.5	18.0	20.0	19.3	19.6	19.3	18.3	18.7
7	12.7	11.8	12.2	18.5	17.5	18.0	20.6	19.9	20.1	18.8	18.1	18.5
8	12.9	12.0	12.4	17.5	16.6	17.1	20.5	19.9	20.2	19.5	18.2	18.7
9	13.5	12.4	12.9	16.8	16.2	16.5	20.3	19.7	20.1	20.9	19.5	20.1
10	13.8	13.0	13.3	16.2	15.2	15.7	19.7	19.3	19.6	22.1	20.9	21.5
11	14.1	13.4	13.6	15.6	15.0	15.3	19.3	18.9	19.1	23.1	22.0	22.5
12	14.3	13.5	13.8	15.6	15.1	15.4	19.6	19.2	19.4	24.1	23.0	23.6
13	14.3	13.7	14.0	15.7	15.2	15.4	19.8	18.8	19.4	25.0	24.0	24.5
14	14.5	13.8	14.2	15.9	15.3	15.6	19.3	18.7	19.0	25.1	24.5	24.9
15	14.5	13.8	14.0	16.2	15.6	15.9	19.0	17.7	18.3	25.2	24.5	24.8
16	14.5	13.6	14.1	16.4	15.8	16.1	17.7	17.2	17.5	25.2	24.5	24.8
17	13.6	12.6	13.2	16.3	15.8	16.1	18.0	16.7	17.3	24.7	23.6	24.3
18	13.1	12.4	12.7	16.5	15.9	16.2	18.4	17.8	18.1	23.5	22.5	23.1
19	12.6	12.0	12.4	17.0	16.1	16.6	19.5	18.4	19.0	23.6	23.1	23.4
20	13.0	12.0	12.5	17.5	16.8	17.2	19.6	19.3	19.5	24.1	23.4	23.8
21	13.7	12.7	13.1	17.8	17.3	17.5	19.3	18.8	19.1	24.6	23.5	24.1
22	14.1	13.2	13.6	18.1	17.6	17.9	18.8	18.3	18.6	25.1	24.5	24.8
23	14.9	13.9	14.4	18.6	18.1	18.3	18.9	18.0	18.5	25.7	24.7	25.2
24	15.5	14.4	15.0	19.1	18.6	18.8	18.8	17.7	18.2	26.0	25.3	25.7
25	15.4	14.9	15.1	19.0	18.4	18.7	19.4	18.4	18.9	26.2	25.8	26.0
26	15.7	15.0	15.3	19.5	17.6	18.9	20.5	19.4	20.0	26.4	25.9	26.1
27	16.3	15.1	15.8	19.5	16.5	18.8	20.8	20.5	20.7	26.3	25.4	26.0
28	17.1	15.9	16.6	19.2	17.7	18.6	20.7	20.2	20.5	25.9	25.1	25.5
29	17.5	16.7	17.0	17.5	16.6	17.1	20.8	20.0	20.4	25.1	22.5	24.2
30	---	---	---	16.9	16.2	16.6	21.3	20.1	20.8	22.4	21.4	21.8
31	---	---	---	16.8	16.2	16.6	---	---	---	22.4	21.5	22.0
MONTH	17.5	11.6	13.6	19.5	15.0	17.0	21.3	16.5	19.0	26.4	17.8	22.7
		JUNE			JULY			AUGUST			SEPTEMBER	
1	23.5	22.5	22.9	28.3	28.0	28.1	29.7	29.2	29.4	30.4	29.6	30.0
2	25.0	23.5	24.4	28.5	28.0	28.3	29.5	29.1	29.3	30.1	29.6	29.8
3	26.2	25.2	25.7	28.6	28.1	28.4	29.5	28.9	29.2	30.5	29.4	30.0
4	26.3	25.4	25.9	28.2	27.5	27.9	29.3	28.5	28.9	29.4	28.2	29.1
5	26.0	25.0	25.6	28.1	27.7	28.0	29.3	28.5	28.9	28.5	27.8	28.1
6	25.3	24.2	24.5	28.3	27.7	27.9	29.3	28.7	29.1	28.0	27.5	27.8
7	24.2	23.4	23.8	28.8	28.1	28.5	28.6	28.1	28.4	28.2	27.6	27.9
8	23.9	23.4	23.7	29.3	28.4	28.9	28.4	28.1	28.3	28.3	27.7	28.0
9	24.9	23.8	24.3	29.5	29.0	29.3	28.2	27.8	28.0	28.7	28.1	28.4
10	25.3	24.6	25.0	29.3	28.8	29.1	28.2	27.7	28.0	28.9	28.2	28.5
11	25.9	25.0	25.4	28.7	28.1	28.5	28.2	27.8	28.0	28.5	27.4	28.1
12	26.0	25.2	25.5	28.4	27.6	28.0	27.8	27.4	27.6	27.4	26.7	27.1
13	26.1	25.6	25.9	28.2	27.6	27.9	27.9	27.6	27.8	26.7	25.6	26.3
14	26.3	25.7	26.0	27.8	27.3	27.7	27.8	27.3	27.5	25.6	25.1	25.4
15	26.9	26.1	26.5	28.1	27.5	27.8	27.4	26.9	27.3	25.7	24.9	25.3
16	26.7	26.1	26.4	28.9	28.2	28.5	27.5	27.0	27.3	26.5	25.5	26.0
17	27.0	26.6	26.8	28.8	28.1	28.5	27.7	27.1	27.4	26.7	26.0	26.3
18	26.7	26.2	26.5	28.6	28.3	28.5	28.3	27.5	27.9	27.0	26.0	26.5
19	26.9	26.4	26.7	29.0	28.2	28.6	29.1	28.0	28.5	27.4	26.4	26.9
20	26.9	26.5	26.7	28.7	28.3	28.5	28.9	28.6	28.7	26.7	25.4	26.3
21	27.4	26.5	26.9	28.8	28.1	28.5	28.8	28.3	28.5	25.3	24.2	24.6
22	27.6	27.1	27.3	29.7	28.3	29.0	28.9	28.1	28.5	24.2	23.4	23.8
23	28.1	27.5	27.8	30.3	---	28.3	28.8	28.3	28.6	23.7	23.2	23.5
24	28.1	27.8	28.0	30.2	---	25.8	29.4	28.9	29.1	24.3	23.5	23.9
25	28.5	27.7	28.1	30.7	---	28.2	29.6	29.1	29.4	24.8	23.8	24.3
26	28.2	27.7	28.0	30.6	---	29.0	30.3	29.3	29.8	25.2	24.4	24.8
27	28.3	27.9	28.2	29.7	29.2	29.4	30.7	29.9	30.3	25.4	24.7	25.0
28	28.5	28.1	28.3	29.9	29.2	29.5	30.8	29.2	30.1	24.8	24.1	24.5
29	28.5	27.9	28.2	29.9	29.4	29.6	29.6	28.2	29.2	24.4	23.7	24.0
30	28.3	27.9	28.1	29.9	29.2	29.6	29.4	28.9	29.2	24.4	23.5	23.9
31	---	---	---	29.5	28.6	29.2	30.1	29.4	29.7	---	---	---
MONTH	28.5	22.5	26.2	30.7	---	28.5	30.8	26.9	28.6	30.5	23.2	26.5

09429500 COLORADO RIVER BELOW IMPERIAL DAM, AZ-CA

LOCATION.--Forebay gage: Lat 32°52'59", long 114°27'57", in NW¼SW¼ sec.9, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, near All-American Canal headworks at west end of Imperial Dam, 5 mi upstream from Laguna Dam, 15 mi northeast of Yuma, Az., 90 mi downstream from Palo Verde Dam, and 147 mi downstream from Parker Dam.

DRAINAGE AREA.--188,500 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--October 1960 to current year. Prior to October 1971 published as "at Imperial Dam." Records of flow reaching Imperial Dam, formerly published with this station, are now published separately as sta 09429490, "Colorado River above Imperial Dam."

GAGE.--Water-stage recorder in forebay, 12 calibrated gates on California sluiceway, 8 calibrated gates on Gila sluiceway, and calibrated manometer on each discharge pipe from desilting basin. Datum of forebay gage is 162.00 ft, U.S. Bureau of Reclamation datum.

REMARKS.--No estimated daily discharges. Records good. Records of daily discharge show flow of Colorado River passing Imperial Dam, and include water released to river through California and Gila sluiceways, sludge from desilting basins returned to river, and leakage through dam. For records of flow reaching Imperial Dam see sta 09429490. Flow of Colorado River regulated by many reservoirs, principally Lake Mead, since 1935. Many diversions from Colorado River and tributaries above station. Diversion to Mittry Lake and monthend contents of Senator Wash Reservoir also are published with sta 09429490.

COOPERATION.--Records of gate openings and sludge return flow from disilting basins furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 30,200 ft^3/s Aug. 18, 19, 1983; minimum daily, 27 ft^3/s Dec. 15-18, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,900 ft^3/s Aug. 29; minimum daily, 359 ft^3/s Oct. 8-10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1360	821	498	497	506	521	521	521	709	705	829	752
2	1360	688	499	562	505	521	521	521	516	505	714	1130
3	925	821	494	628	506	521	680	521	491	490	719	795
4	1270	819	493	626	506	521	1010	521	491	490	975	707
5	1340	823	495	624	507	521	1010	521	491	490	1150	1350
6	882	817	497	626	646	521	948	521	491	490	536	1670
7	570	821	497	628	646	521	548	521	491	490	490	923
8	359	825	496	815	644	521	542	878	491	579	490	584
9	359	896	494	627	643	521	690	521	491	490	490	632
10	359	812	494	629	646	521	690	521	491	490	810	603
11	423	815	497	667	646	521	691	521	491	490	512	490
12	780	800	496	666	645	521	866	521	491	490	761	557
13	1320	393	495	667	646	521	1140	521	491	490	548	444
14	481	371	496	747	646	521	1130	521	491	490	712	1060
15	1180	371	496	693	646	521	1130	521	491	490	881	515
16	924	371	497	528	646	521	1130	573	491	490	903	436
17	848	371	497	527	602	521	1130	735	491	490	730	4[illegible]2
18	845	371	497	524	521	521	658	1040	491	490	698	672
19	912	371	497	527	521	521	521	639	554	490	709	780
20	914	441	497	527	521	521	521	639	504	490	719	622
21	877	371	497	527	599	521	718	639	491	808	955	810
22	814	371	497	526	646	521	812	819	605	490	883	398
23	840	584	497	526	646	521	521	636	596	490	1420	884
24	840	371	496	527	648	521	968	561	491	622	1440	701
25	886	371	497	525	644	521	1170	791	491	490	1460	542
26	835	371	497	524	562	521	795	738	491	553	1200	361
27	845	371	497	526	521	521	1080	605	491	490	598	616
28	841	371	494	526	521	521	896	682	491	490	1340	706
29	845	371	496	526	521	521	521	724	799	490	1900	363
30	930	371	497	526	---	521	521	1230	968	490	1220	917
31	841	---	496	527	---	521	---	1080	---	490	662	---
TOTAL	26805	16941	15383	18121	17103	16151	24079	20303	16053	16022	27454	21502
MEAN	865	565	496	585	590	521	803	655	535	517	886	717
MAX	1360	896	499	815	648	521	1170	1230	968	808	1900	1670
MIN	359	371	493	497	505	521	521	521	491	490	490	361
AC-FT	53170	33600	30510	35940	33920	32040	47760	40270	31840	31780	54460	42650

CAL YR 1987 TOTAL 823943 MEAN 2257 MAX 12000 MIN 359 AC-FT 1634000
WTR YR 1988 TOTAL 235917 MEAN 645 MAX 1900 MIN 359 AC-FT 467900

09429600 COLORADO RIVER BELOW LAGUNA DAM, AZ-CA

LOCATION.--Lat 32°48'44", long 114°30'51", in SE¼NE¼ sec.35, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on right bank 1.4 mi downstream from Laguna Dam, 2.8 mi northeast of Bard, Ca., and 10 mi northeast of Yuma, Az.

DRAINAGE AREA.--188,600 mi^2, approximately, including 3,959 mi^2 in Great Divide basin in southern Wyoming, which is noncontributing.

PERIOD OF RECORD.--December 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 120.84 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark).

REMARKS.--No estimated daily discharges. Records fair. Natural flow of Colorado River at this point is affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, municipal, and industrial uses, and return flows from irrigated areas. Flow past station consists mainly of water released through Imperial Dam, sludge from the desilting basins at Imperial Dam, seepage through Imperial Dam, and seepage from the All-American Canal and the Gila Gravity Main Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 30,900 ft^3/s Aug. 19, 1983; minimum daily, 71 ft^3/s May 29, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,630 ft^3/s Aug. 29; minimum daily, 332 ft^3/s May 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1540	884	380	565	585	558	566	599	728	771	769	730
2	1470	874	400	600	578	558	568	594	732	746	816	1110
3	1300	778	412	665	579	556	581	471	688	663	822	1210
4	1200	731	512	678	566	559	752	332	653	639	786	682
5	1310	779	551	688	591	558	748	357	620	599	1050	1480
6	1010	814	524	683	683	558	739	365	595	574	854	2130
7	729	814	498	719	719	557	782	441	585	567	752	1190
8	566	810	507	800	709	558	839	743	570	633	610	617
9	599	852	522	784	699	563	769	856	566	686	544	671
10	542	792	528	757	712	566	744	794	560	650	575	742
11	509	767	534	725	740	566	738	600	561	665	682	569
12	615	770	546	713	718	567	799	545	562	674	733	533
13	1340	662	553	718	708	562	1000	548	559	614	1040	588
14	721	580	560	732	703	565	902	548	558	577	637	1190
15	1220	506	571	702	703	568	915	776	555	593	793	784
16	955	477	571	623	697	566	919	808	556	596	1270	464
17	900	507	577	605	687	561	923	736	556	598	765	613
18	898	500	576	597	627	563	809	768	555	596	955	657
19	905	483	571	586	605	563	667	816	556	586	1010	850
20	912	458	562	581	594	562	684	679	599	578	956	794
21	950	420	563	588	602	567	706	608	584	601	940	880
22	913	385	562	594	720	572	714	591	576	595	967	615
23	806	357	557	587	714	570	727	685	624	576	1360	890
24	821	351	558	581	702	564	763	637	612	584	1570	952
25	825	390	557	579	699	567	1040	678	594	604	1670	620
26	831	411	558	582	656	566	999	729	584	598	1310	545
27	831	415	561	585	570	567	866	720	609	593	688	727
28	830	412	564	581	566	566	1000	722	636	589	1070	895
29	827	413	563	582	561	571	859	818	599	590	2630	562
30	885	471	566	581	---	570	643	1120	681	703	1370	893
31	899	---	566	581	---	566	---	1560	---	776	911	---
TOTAL	28659	17863	16630	19942	18993	17480	23861	21244	18013	19404	30905	25183
MEAN	924	595	536	643	655	564	795	685	600	626	997	839
MAX	1540	884	577	800	740	572	1040	1560	732	776	2630	2130
MIN	509	351	380	565	561	556	566	332	555	567	544	464
AC-FT	56850	35430	32990	39550	37670	34670	47330	42140	35730	38490	61300	49950

CAL YR 1987 TOTAL 847334 MEAN 2321 MAX 12000 MIN 351 AC-FT 1681000
WTR YR 1988 TOTAL 258177 MEAN 705 MAX 2630 MIN 332 AC-FT 512100

09430500 GILA RIVER NEAR GILA, NM

LOCATION.--Lat 33°03'40", long 108°32'12", in NE¼NW¼ sec.30, T.14 S., R.16 W., Grant County, Hydrologic Unit 15040001, on left bank at Hooker damsite, 1.6 mi upstream from Mogollon Creek, 7 mi northeast of Gila, and at mile 572.5.

DRAINAGE AREA.--1,864 mi^2.

PERIOD OF RECORD.--April to December 1914, December 1927 to current year. Monthly discharge only December 1927 to September 1930, published in WSP 1313.

REVISED RECORDS.--WSP 1283: Drainage area. WSP 1313: 1944 (M), 1949 (M). WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Datum of gage is 4,655.8 ft above National Geodetic Vertical Datum of 1929, (river-profile survey). Prior to Dec. 31, 1928, at site 5 mi upstream at different datum. Dec. 31, 1928, to Jan. 7, 1942, at site 200 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 500 acres upstream from station. Several observations of water temperature were made during the year. National Weather Service gage height and rain gage satellite telemeter at station.

AVERAGE DISCHARGE.--61 years (water years 1928-88), 151 ft^3/s, 109,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,200 ft^3/s, Dec. 28, 1984, gage height, 13.0 ft, from floodmark, from rating curve extended above 7,000 ft^3/s on basis of slope-area measurement at gage height 12.5 ft; maximum gage height, 17.2 ft, from floodmark, Sept. 29, 1941; minimum, 14 ft^3/s, July 15, 1971.

EXTREMES OUTSIDE PERIOD OF RECORD.--Other major floods occurred in November 1905, December 1906, and January 1916.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
Feb. 4	0215	656	2.52	Aug. 18	2000	2,920	4.55
Feb. 28	1600	650	2.41	Sept. 3	0645	3,680	4.92
July 9	0130	952	3.02	Sept. 21	2300	*14,400	*8.50
Aug. 16	0015	6,090	6.14				

Minimum daily discharge, 47 ft^3/s, June 23, 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	72	72	85	112	497	179	178	77	54	110	1830
2	69	73	71	84	116	471	171	180	75	65	127	1510
3	67	75	71	83	304	425	157	184	72	64	123	2600
4	66	77	71	84	582	384	147	175	69	59	195	1360
5	65	77	74	83	584	347	141	164	69	56	257	868
6	64	75	74	95	471	327	137	154	70	60	207	683
7	63	74	75	103	356	324	136	146	64	66	213	590
8	63	77	74	99	311	320	139	143	61	63	312	514
9	63	78	74	95	301	314	144	139	59	255	293	465
10	62	76	74	92	304	288	149	133	57	120	401	424
11	62	75	74	89	296	271	157	127	55	120	357	401
12	61	74	74	89	283	252	156	123	54	95	273	416
13	62	74	74	88	267	230	150	122	52	120	222	466
14	66	75	77	86	263	213	151	124	50	97	194	439
15	67	76	77	84	263	193	155	127	50	87	1440	407
16	66	77	76	84	251	182	181	131	51	81	3800	355
17	66	76	75	84	241	171	250	133	51	78	2170	325
18	65	75	85	93	244	161	317	135	53	76	1280	299
19	65	74	92	99	235	154	299	133	52	86	1250	277
20	65	74	90	97	220	150	307	133	50	93	1560	268
21	65	73	88	92	202	143	291	124	50	88	1760	3310
22	65	73	87	89	193	140	270	114	48	89	1250	6320
23	67	73	82	89	193	140	255	107	47	84	1040	1750
24	71	72	81	89	209	143	233	100	47	81	1030	894
25	72	73	85	89	232	146	213	95	48	77	778	548
26	69	72	90	91	272	153	196	93	54	74	603	400
27	68	73	86	93	424	165	183	91	55	71	569	322
28	70	72	83	96	572	179	176	86	57	70	797	277
29	69	71	81	98	524	193	176	83	56	75	2200	248
30	69	71	82	102	---	200	176	79	54	107	1720	226
31	69	---	83	107	---	192	---	79	---	136	1410	---
TOTAL	2053	2227	2452	2831	8825	7468	5792	3935	1707	2747	27941	28792
MEAN	66.2	74.2	79.1	91.3	304	241	193	127	56.9	88.6	901	960
MAX	72	78	92	107	584	497	317	184	77	255	3800	6320
MIN	61	71	71	83	112	140	136	79	47	54	110	226
AC-FT	4070	4420	4860	5620	17500	14810	11490	7810	3390	5450	55420	57110

CAL YR 1987 TOTAL 53415 MEAN 146 MAX 522 MIN 39 AC-FT 105900
WTR YR 1988 TOTAL 96770 MEAN 264 MAX 6320 MIN 47 AC-FT 191900

09431500 GILA RIVER NEAR REDROCK, NM

(National stream-quality accounting network and radiochemical network station)

LOCATION.--Lat 32°43'37", long 108°40'30", in W½ sec.23, T.18 S., R.18 W., Grant County, Hydrologic Unit 15040002, on left bank 0.2 mi downstream from Copper Canyon, 0.2 mi upstream from lower end of box canyon, 4.7 mi northeast of Redrock, 14 mi downstream from Mangas Creek, and at mile 539.2.

DRAINAGE AREA.--2,829 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1904 to February 1905 (gage heights only). May 1905 to December 1906, January to December 1907 and July to October 1908 (gage heights only). November 1908 to December 1910, January 1911 to January 1912 and May to June 1912 (gage heights only). August 1912 to September 1955, October 1962 to current year. Monthly or annual discharge only for some periods, published in WSP 1313. Published as "near Cliff" 1904-7.

REVISED RECORDS.--WSP 1213: 1906, 1911-15, 1931, 1936-37, 1939, 1941, 1944, 1945(P), 1946(M), 1947. WSP 1283: Drainage area. WSP 1926: 1955. WDR NM-78-1: 1977.

GAGE.--Water-stage recorder. Elevation of gage is 4,090 ft above National Geodetic Vertical Datum of 1929, from plane table survey. Prior to Dec. 31, 1907, nonrecording gage at site 13.5 mi upstream at different datum. May 14, 1908, to July 16, 1909, nonrecording gage at site 0.2 mi downstream at different datum. June 13, 1980 to Feb. 23, 1983 at site 1,300 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 10 to Dec. 16, June 4-14, and Aug. 11-23. Water-discharge records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 5,000 acres upstream from station. Gage height and rain gage satellite telemeter at station.

AVERAGE DISCHARGE.--72 years (water years 1906, 1909-10, 1913-55, 1963-88), 211 ft^3/s, 152,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,800 ft^3/s, Dec. 19, 1978, gage height, 29.8 ft, in gage well, 34.1, ft from floodmarks, from rating curve extended above 9,500 ft^3/s on basis of slope-area measurement of peak flow; minimum, 2.2 ft^3/s, Aug. 5, 1947.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 3	0100	4,570	10.44
Sept. 22	0530	*16,600	*16.50

Minimum daily discharge, 19 ft^3/s, June 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	60	66	108	154	483	180	201	67	31	278	1900
2	69	70	72	95	172	471	170	210	76	28	451	1910
3	51	73	74	91	239	454	151	220	69	32	304	2710
4	50	84	75	91	612	424	140	203	66	37	305	1670
5	50	95	74	98	781	390	127	170	60	35	707	1340
6	63	105	72	120	680	371	124	167	58	42	646	1160
7	78	83	71	128	472	374	129	151	55	45	800	1000
8	74	81	72	133	433	377	137	146	66	95	743	868
9	75	82	74	115	422	363	120	143	64	336	1100	756
10	53	83	76	108	424	351	124	146	61	206	848	665
11	52	93	78	111	417	329	127	147	56	164	720	608
12	54	96	76	127	409	292	140	140	49	183	415	782
13	63	95	76	123	391	269	145	130	43	167	305	787
14	68	78	78	121	379	241	149	109	34	114	260	697
15	74	73	77	117	375	213	149	108	23	91	1000	670
16	65	73	78	97	363	197	157	108	22	99	4280	620
17	59	78	77	93	365	190	248	102	26	88	2960	561
18	55	81	98	105	368	181	351	113	32	91	1540	500
19	57	89	106	113	361	178	352	129	27	131	1510	476
20	56	100	103	125	325	170	368	126	23	142	1500	468
21	57	86	104	135	302	180	357	107	21	208	1930	4080
22	60	82	103	128	278	168	334	92	22	95	1480	5920
23	72	80	106	104	262	164	315	88	20	88	1260	1610
24	64	84	112	100	248	161	285	96	19	81	1470	1000
25	64	93	114	106	282	162	273	102	22	71	1210	834
26	71	94	116	124	327	160	255	104	24	82	1060	729
27	83	98	101	127	377	150	222	98	25	64	999	646
28	86	76	93	128	538	158	197	76	29	67	1020	600
29	86	68	89	126	519	177	206	71	33	61	1910	564
30	79	63	86	115	---	192	202	63	33	98	1960	504
31	61	---	95	131	---	187	---	61	---	262	1660	---
TOTAL	2028	2496	2692	3543	11275	8177	6234	3927	1225	3334	36631	36635
MEAN	65.4	83.2	86.8	114	389	264	208	127	40.8	108	1182	1221
MAX	86	105	116	135	781	483	368	220	76	336	4280	5920
MIN	50	60	66	91	154	150	120	61	19	28	260	468
AC-FT	4020	4950	5340	7030	22360	16220	12370	7790	2430	6610	72660	72670

CAL YR 1987 TOTAL 65189 MEAN 179 MAX 748 MIN 29 AC-FT 129300
WTR YR 1988 TOTAL 118197 MEAN 323 MAX 5920 MIN 19 AC-FT 234400

09431500 GILA RIVER NEAR REDROCK, NM--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	SPECIFIC CONDUCTANCE LAB (US/CM) (90095)	PH (STANDARD UNITS) (00400)	PH LAB (STANDARD UNITS) (00403)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (FTU) (00076)	OXYGEN, DISSOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
NOV 04...	1030	83	365	375	--	8.40	16.0	13.0	15	10.1	130	0
JAN 06...	0945	120	339	342	8.30	8.40	10.0	8.0	1.4	11.2	110	0
MAR 22...	1030	160	285	292	8.20	8.20	21.0	10.0	4.0	10.4	91	0
MAY 03...	1115	220	250	249	8.20	8.20	20.5	14.0	6.9	9.3	79	0
JUL 20...	1100	140	225	249	7.90	8.00	27.5	22.0	450	7.6	76	0
AUG 23...	1600	1280	210	213	8.00	7.50	37.0	25.0	340	7.0	76	0

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKALINITY LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)
NOV 04...	39	7.8	30	1	2.1	--	--	--	142	31	13	1.8
JAN 06...	33	7.0	28	1	2.2	161	0	132	127	28	12	2.1
MAR 22...	27	5.8	23	1	1.6	120	0	98	106	25	9.8	1.7
MAY 03...	23	5.1	21	1	1.5	110	0	90	90	25	7.6	1.6
JUL 20...	23	4.4	16	0.8	3.2	98	0	80	92	20	6.5	1.0
AUG 23...	22	5.1	13	0.7	2.1	100	0	82	87	15	4.2	0.80

DATE	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P) (00671)
NOV 04...	33	251	244	0.230	0.010	0.240	<0.010	0.030	--	0.020	0.030
JAN 06...	31	229	221	--	<0.010	0.330	0.019	<0.010	0.79	0.090	0.030
MAR 22...	30	194	188	--	<0.010	0.200	<0.010	<0.010	--	0.050	0.030
MAY 03...	31	166	171	--	<0.010	0.100	0.020	<0.010	0.28	0.050	0.030
JUL 20...	26	155	156	--	<0.010	<0.100	0.050	0.050	0.45	0.040	0.030
AUG 23...	34	156	149	--	<0.010	<0.100	0.030	0.030	0.47	0.110	0.080

< Actual value is known to be less than value shown.

09431500 GILA RIVER NEAR REDROCK, NM--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)
NOV											
04...	10	1	19	<0.5	1	<1	<3	3	14	<5	23
JAN											
06...	--	--	--	--	--	--	--	--	--	--	--
MAR											
22...	--	--	--	--	--	--	--	--	--	--	--
MAY											
03...	60	2	18	<0.5	1	<1	<3	5	20	<5	19
JUL											
20...	60	3	32	<0.5	<1	<1	<3	9	30	<5	11
AUG											
23...	20	1	12	<0.5	<1	<1	<3	<1	24	<5	8

DATE	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)
NOV											
04...	4	<0.1	<10	1	<1	<1.0	160	<6	7	1.4	<0.4
JAN											
06...	--	--	--	--	--	--	--	--	--	--	--
MAR											
22...	--	--	--	--	--	--	--	--	--	--	--
MAY											
03...	2	0.1	<10	3	<1	<1.0	97	<6	4	--	--
JUL											
20...	2	<0.1	<10	2	<1	<1.0	100	<6	12	0.6	89
AUG											
23...	5	--	<10	<1	<1	1.0	94	7	5	--	--

DATE	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/ YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90) (80060)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DISSOLVED (UG/L AS U) (22703)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
NOV											
04...	2.5	1.6	1.8	1.6	0.03	1.5	41	9.2	90	58	24
JAN											
06...	--	--	--	--	--	--	114	37	67	K89	76
MAR											
22...	--	--	--	--	--	--	52	22	37	K3	110
MAY											
03...	--	--	--	--	--	--	496	295	--	K11	22
JUL											
20...	3.4	58	2.6	52	0.03	0.24	1720	650	--	--	4500
AUG											
23...	--	--	--	--	--	--	2870	9920	--	--	--

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09432000 GILA RIVER BELOW BLUE CREEK, NEAR VIRDEN, NM

LOCATION.--Lat 32°38'53", long 108°50'43", in SE¼SW¼ sec.18, T.19 S., R.19 W., Grant County, Hydrologic Unit 15040002, on left bank at head of canyon, 1.4 mi downstream from Blue Creek, 10 mi east of Virden, and 16 mi upstream from New Mexico-Arizona State line.

DRAINAGE AREA.--3,203 mi^2, excluding Animas River basin.

PERIOD OF RECORD.--May to November 1914, March to September 1915, July 1927 to current year. July 1927 to May 1931 monthly discharge only, published in WSP 1313, computed as sum of flow at Virden Bridge, 9 mi downstream, and in Sunset Canal. Published as "Gila River near Duncan, Ariz.," 1914-15 and as "Gila River at Fuller's Ranch, near Duncan, Ariz.," 1931-38.

REVISED RECORDS.--WSP 1283: Drainage area. WSP 1313: 1929, 1931-32(M).

GAGE.--Water-stage recorder. Elevation of gage is 3,875 ft above National Geodetic Vertical Datum of 1929, from river-profile map. May 11, 1914, to Sept. 30, 1915, at site 6 mi downstream, 1,000 ft upstream from intake of Sunset Canal. June 1 to July 7, 1931, nonrecording gage at present site and datum. Since April 18, 1980, supplementary gage on left bank 800 ft downstream at same datum. Since June 1980, crest-stage gages at supplementary gage site.

REMARKS.--Records good except for periods of estimated daily discharges, which are fair. Station is above all Duncan Valley diversions. Diversions for irrigation of about 6,200 acres above station.

AVERAGE DISCHARGE.--61 (water years 1928-88), 199 ft^3/s, 144,200 acre-ft/yr; median of yearly mean discharges, 150 ft^3/s, 109,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 58,700 ft^3/s Dec. 19, 1978, gage height, 29.00 ft, from rating curve extended above 38,000 ft^3/s on basis of slope-area measurement of peak flow; minimum, 1 ft^3/s July 14, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 3	1945	2,540	9.13	Aug. 16	0900	5,710	11.46
Aug. 7	0215	1,950	8.56	Sept. 3	0315	3,400	9.91
Aug. 9	0800	2,810	9.36	Sept. 22	unknown	*9,000	*13.58

Minimum daily discharge, 27 ft^3/s June 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	69	73	110	142	776	227	226	71	39	168	1500
2	80	74	85	107	158	695	227	224	82	36	601	1690
3	66	78	91	100	191	612	206	251	83	34	445	2730
4	61	85	92	98	648	523	195	234	72	36	312	1950
5	59	100	81	101	1390	462	180	198	64	44	742	1220
6	58	105	77	121	1530	421	175	183	58	44	629	928
7	79	89	77	125	941	398	173	176	55	48	1010	749
8	78	88	76	136	654	407	185	161	66	97	883	613
9	77	89	91	122	516	395	173	156	64	225	1550	497
10	67	87	92	116	456	387	175	149	61	333	1120	411
11	58	99	93	112	427	365	179	159	56	193	1050	363
12	56	99	82	124	398	324	187	144	49	218	523	442
13	66	99	81	122	364	296	204	144	43	174	356	447
14	74	88	85	122	342	270	213	124	39	126	293	e400
15	83	88	87	121	331	248	220	114	35	105	490	e350
16	73	85	88	108	317	232	225	113	32	105	4620	e340
17	68	85	91	102	305	222	290	109	30	96	3670	e290
18	65	85	106	112	311	216	400	108	30	91	1730	e270
19	62	87	114	118	316	201	441	126	37	126	1760	e250
20	61	98	113	118	269	194	464	128	33	145	1400	e240
21	61	92	112	133	246	195	475	113	32	188	2050	e1500
22	65	86	110	132	225	185	449	102	30	99	1670	e4500
23	75	85	108	118	206	185	414	94	30	85	1130	e2700
24	79	88	116	108	198	182	368	94	27	76	1170	e1500
25	74	96	117	105	216	183	336	105	28	67	837	e950
26	74	98	130	118	270	182	317	107	30	71	606	e800
27	80	100	113	122	330	177	285	105	30	65	470	e650
28	89	93	104	124	624	180	248	93	33	60	452	e550
29	91	83	100	129	848	197	245	84	38	57	1170	472
30	88	77	97	118	---	219	236	79	41	64	1800	429
31	76	---	99	121	---	228	---	75	---	214	1380	---
TOTAL	2230	2675	2981	3623	13169	9757	8112	4278	1379	3361	36087	29731
MEAN	71.9	89.2	96.2	117	454	315	270	138	46.0	108	1164	991
MAX	91	105	130	136	1530	776	475	251	83	333	4620	4500
MIN	56	69	73	98	142	177	173	75	27	34	168	240
AC-FT	4420	5310	5910	7190	26120	19350	16090	8490	2740	6670	71580	58970

CAL YR 1987 TOTAL 63054 MEAN 173 MAX 1160 MIN 17 AC-FT 125100
WTR YR 1988 TOTAL 117383 MEAN 321 MAX 4620 MIN 27 AC-FT 232800

e Estimated

09442000 GILA RIVER NEAR CLIFTON, AZ

LOCATION.--Lat 32°57'57", long 109°18'35", in NE¼SE¼ sec.25, T.5 S., R.29 E., Greenlee County, Hydrologic Unit 15040002, on right bank 60 ft upstream from bridge on county road, 6 mi upstream from San Francisco River, and 6 mi south of Clifton.

DRAINAGE AREA.--4,010 mi^2.

PERIOD OF RECORD.--November 1910 to July 1918 (published as "at Guthrie"), October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1059: 1911-12, 1915, 1917. WSP 1179: 1929(M), 1934(M). WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,336.38 ft above National Geodetic Vertical Datum of 1929. Nov. 6, 1910, to July 11, 1918, non-recording gage or water-stage recorder at two sites about 6 mi upstream at Guthrie at different datums. March 1928 to June 1948 water-stage recorder at present site at datum 0.91 ft lower. June 1948 to Oct. 17, 1967, water-stage recorder at site 0.2 mi upstream at datum 3.12 ft higher. Oct. 18, 1967, to June 23, 1974, Apr. 10, 1978, to Feb. 6, 1979, at site 500 ft downstream at datum 0.44 ft higher. June 24, 1974 to Apr. 9, 1978, at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 14,300 acres above station. Station is below all Duncan Valley diversions.

AVERAGE DISCHARGE.--67 years (water years 1912-17, 1928-88), 199 ft^3/s, 144,200 acre-ft/yr; median of yearly mean discharges, 140 ft^3/s, 101,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,000 ft^3/s Dec. 19, 1978, gage height, 23.80 ft, from rating curve extended above 28,000 ft^3/s; minimum daily, 3.7 ft^3/s July 27, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 16	a2200	3,060	7.86
Sept. 22	2200	*6,710	*b10.3[illegible]

a about
b From high-water mark.
Minimum daily discharge, 27 ft^3/s June 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	138	139	94	116	132	609	140	221	55	28	197	1200
2	107	187	89	119	139	587	145	199	54	28	361	e1440
3	87	119	84	122	164	584	143	201	55	28	494	e1840
4	78	109	84	122	198	565	130	211	60	28	655	e1400
5	73	116	87	120	521	525	119	194	59	29	597	e1040
6	71	135	81	122	871	460	107	174	56	33	633	e840
7	67	135	71	130	761	e425	95	166	55	36	763	720
8	66	132	71	138	639	e400	90	159	52	38	712	682
9	e63	122	73	139	539	e365	94	149	49	37	875	620
10	e61	120	73	132	472	e340	90	142	49	128	837	537
11	e57	116	78	128	428	e320	77	130	48	191	632	471
12	e55	120	84	130	407	e295	76	125	41	209	700	612
13	e50	121	88	129	382	e270	80	112	38	136	563	521
14	e47	117	80	133	357	e250	100	111	35	105	428	472
15	e44	119	75	132	347	e225	122	107	34	77	503	410
16	43	106	80	132	342	e210	137	92	34	64	1460	376
17	48	106	87	126	336	e195	158	83	33	62	2580	344
18	50	108	174	130	327	e180	211	79	33	67	1580	317
19	49	110	150	131	333	e170	301	76	32	72	1180	275
20	49	109	145	132	335	e155	333	76	31	67	1080	286
21	48	116	137	133	313	e150	356	83	31	91	1260	407
22	48	107	132	133	282	e140	367	80	31	133	1250	4200
23	53	103	129	136	267	e135	362	76	31	84	1130	3570
24	57	100	125	133	263	128	342	72	31	64	952	1490
25	58	103	130	123	262	121	321	68	32	56	940	1100
26	62	108	136	119	255	116	303	63	31	48	808	884
27	62	111	141	124	282	117	272	62	30	99	707	713
28	62	111	132	132	331	110	250	61	29	61	673	583
29	66	114	124	132	557	98	243	61	28	43	722	501
30	74	96	121	136	---	107	233	58	27	33	1230	454
31	76	---	116	135	---	125	---	56	---	64	1140	---
TOTAL	1969	3515	3271	3999	10842	8477	5797	3547	1204	2239	27842	28305
MEAN	63.5	117	106	129	374	273	193	114	40.1	72.2	898	943
MAX	138	187	174	139	871	609	367	221	60	209	2580	4200
MIN	43	96	71	116	132	98	76	56	27	28	197	275
AC-FT	3910	6970	6490	7930	21510	16810	11500	7040	2390	4440	55220	56140

CAL YR 1987 TOTAL 57517.1 MEAN 158 MAX 835 MIN 3.7 AC-FT 114100
WTR YR 1988 TOTAL 101007 MEAN 276 MAX 4200 MIN 27 AC-FT 200300

e Estimated

09442680 SAN FRANCISCO RIVER NEAR RESERVE, NM

LOCATION.--Lat 33°44'12", long 108°46'14", in NE¼NW¼SE¼ sec.35, T.6 S., R.19 W., Catron County, Hydrologic Unit 15040004, on left bank 1,300 ft downstream from Rainbow Bridge Canyon, 1.7 mi northwest of Reserve, and at mile 563.1.

DRAINAGE AREA.--350 mi^2, approximately.

PERIOD OF RECORD.--March 1959 to current year.

REVISED RECORDS.--WDR NM-78-1: 1977. WRD Nm-84-1: 1973, 1979-80.

GAGE.--Water-stage recorder. Elevation of gage is 5,820 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Dec. 15, 1972 at site 1,800 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Jan. 5 to Feb. 9 and Sept. 16-30. Records good except for estimated daily discharges, which are poor. Possible minor regulation by Luna Lake, 27 mi upstream. Diversions for irrigation of about 280 acres upstream from station. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--29 years, 29.1 ft^3/s, 21,080 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,830 ft^3/s, Oct. 1, 1983, gage height, 11.71 ft recorded, 11.3 ft, from outside floodmarks, from rating curve extended above 1,400 ft^3/s on basis of slope-area measurement of peak flow; minimum, 1.0 ft^3/s, Mar. 16, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, about 15 ft, as determined in 1962 from old floodmarks. Major floods of Nov. 26, 1905 and Dec. 3, 1906, exceeded 20,000 ft^3/s at Alma (downstream). See WSP 1313.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage Height (ft)
July 31	1530	827	*3.52	Aug. 10	1745	533	2.75
Aug. 4	1530	551	2.78	Aug. 31	1945	*1,070	3.39

Minimum discharge, 3.1 ft^3/s June 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	24	11	14	19	305	28	55	16	13	16	499
2	10	20	12	15	21	223	28	47	17	18	16	330
3	11	16	11	15	55	169	27	42	16	12	15	229
4	11	13	12	16	57	137	22	37	18	11	39	143
5	11	11	13	16	50	124	20	31	22	8.2	18	100
6	10	16	13	17	45	123	18	27	18	7.0	17	76
7	10	23	13	17	40	127	17	26	16	6.8	14	60
8	10	18	12	16	41	114	17	24	16	5.0	18	51
9	9.7	15	12	16	42	89	17	22	16	6.8	17	45
10	9.7	12	12	16	42	91	16	20	15	11	35	32
11	10	12	12	15	42	74	15	19	13	10	11	29
12	10	12	12	14	41	61	14	17	12	7.5	8.4	154
13	9.7	12	13	15	44	56	13	14	7.5	7.2	8.4	98
14	9.6	12	12	15	47	47	18	17	7.3	6.9	7.6	54
15	9.6	12	12	15	44	47	21	16	5.8	7.4	9.5	39
16	9.6	12	12	16	46	43	141	13	11	6.6	11	25
17	9.5	12	13	16	48	38	222	12	10	8.8	9.8	20
18	9.4	12	19	18	44	34	163	12	14	10	10	17
19	9.6	11	17	18	44	33	250	16	18	12	13	15
20	9.5	11	17	15	37	32	194	15	10	10	25	15
21	9.6	12	15	14	36	33	129	21	8.8	8.2	42	16
22	9.3	12	15	14	36	33	121	22	5.1	11	34	16
23	11	11	15	16	41	33	158	21	5.6	10	20	14
24	9.8	11	15	17	54	35	121	18	9.6	9.9	35	13
25	10	12	15	14	74	33	97	24	20	13	25	13
26	11	12	14	16	104	33	81	24	23	13	22	14
27	8.5	11	14	17	213	34	68	21	15	12	32	13
28	8.9	11	14	17	279	35	59	21	15	11	32	13
29	9.9	12	14	17	301	30	67	19	26	15	42	13
30	13	11	13	18	---	27	66	21	14	30	76	13
31	11	---	14	19	---	28	---	22	---	44	424	---
TOTAL	310.9	401	418	494	1987	2319	2228	716	420.7	362.3	1102.7	2169
MEAN	10.0	13.4	13.5	15.9	68.5	74.8	74.3	23.1	14.0	11.7	35.6	72.3
MAX	13	24	19	19	301	305	250	55	26	44	424	499
MIN	8.5	11	11	14	19	27	13	12	5.1	5.0	7.6	13
AC-FT	617	795	829	980	3940	4600	4420	1420	834	719	2190	4300

CAL YR 1987 TOTAL 18729.7 MEAN 51.3 MAX 474 MIN 4.4 AC-FT 37150
WTR YR 1988 TOTAL 12928.6 MEAN 35.3 MAX 499 MIN 5.0 AC-FT 25640

09444000 SAN FRANCISCO RIVER NEAR GLENWOOD, NM

LOCATION.--Lat 33°14'48", long 108°52'47", in NE¼NW¼ sec.23, T.12 S., R.20 W., Catron County, Hydrologic Unit 15040004, on left bank 0.2 mi upstream from hot springs, 5 mi south of Glenwood, 6 mi downstream from Whitewater Creek, and at mile 511.5.

DRAINAGE AREA.--1,653 mi^2.

PERIOD OF RECORD.--October 1927 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1931, 1934, 1936-37, 1940-42, 1943-44(M), 1945-47. WSP 1283: Drainage area. WDR NM-78-1: 1977. WDR NM-79-1: 1973, 1975-77 (P).

GAGE.--Water-stage recorder. Elevation of gage is 4,560 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Feb. 15, 1934, at site 4.5 mi upstream at datum 98.82 ft higher.

REMARKS.--Estimated daily discharges: Dec. 2-14 and Dec. 29 to Jan. 4. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 2,000 acres upstream from station. Gage height and rain gage satellite telemeter at station.

AVERAGE DISCHARGE.--61 years, 84.8 ft^3/s, 61,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,100 ft^3/s, Oct. 2, 1983, gage height, 18.15 ft recorded, 20.80 ft from outside floodmarks, from rating curve extended above 4,200 ft^3/s on basis of slope-area measurements at gage heights 10.74 ft, 15.6 ft and 20.8 ft; minimum, 1.5 ft^3/s Aug. 6, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods probably occurred Jan. 19 and Oct. 14, 1916 when discharges of 60,000 ft^3/s or greater were computed for station at Clifton, AZ. On Nov. 26, 1905, a peak of 25,000 ft^3/s was measured (by float-area method) at station at Alma (about 12 mi upstream, drainage area, 1,560 mi^2); a similar measurement of 21,000 ft^3/s was made at the Alma station for peak of Dec. 3, 1906.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 10	2400	1,480	4.35	Sept. 12	1000	1,980	5.09
Sept. 2	0830	*2,480	*5.47				

Minimum discharge, 23 ft^3/s, Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	79	63	56	62	426	86	184	39	40	83	1230
2	37	83	64	57	65	408	85	178	37	36	134	1630
3	33	74	64	58	170	327	80	160	38	35	131	1150
4	31	65	62	57	272	273	77	143	35	35	155	727
5	28	61	63	59	302	239	76	133	36	33	215	467
6	29	58	62	59	242	218	73	125	35	34	272	337
7	35	58	64	59	194	209	72	120	35	33	263	258
8	33	58	65	59	162	209	71	114	33	42	236	213
9	33	62	63	61	149	200	64	109	31	36	218	184
10	32	62	63	60	141	183	59	101	32	35	306	157
11	33	60	62	59	140	172	59	97	32	41	395	142
12	33	59	64	59	137	152	64	96	33	41	200	866
13	33	59	62	60	134	142	66	98	34	39	160	708
14	38	60	61	59	133	138	82	98	34	39	162	358
15	39	61	60	59	135	128	91	98	31	35	200	250
16	40	61	64	59	135	125	136	97	31	34	245	208
17	41	61	69	61	134	121	309	97	29	33	310	182
18	42	66	73	66	134	115	376	98	26	33	269	162
19	44	67	71	66	133	113	431	98	28	41	336	151
20	47	70	70	67	133	109	549	91	30	43	379	146
21	50	67	67	61	125	104	445	69	30	43	406	177
22	54	69	66	59	121	100	363	60	29	39	309	249
23	58	68	65	59	121	93	316	60	25	42	423	194
24	59	69	66	61	121	85	294	59	27	40	502	161
25	58	66	67	61	124	82	259	55	26	39	405	144
26	54	68	69	61	143	81	232	52	26	36	329	133
27	57	68	62	61	204	85	206	51	30	34	264	125
28	64	66	59	61	380	82	188	47	37	35	288	121
29	56	63	58	61	415	83	191	42	41	36	393	114
30	60	65	57	62	---	85	189	41	40	126	596	107
31	61	---	57	62	---	85	---	41	---	82	851	---
TOTAL	1350	1953	1982	1869	4861	4972	5589	2912	970	1290	9435	11051
MEAN	43.5	65.1	63.9	60.3	168	160	186	93.9	32.3	41.6	304	368
MAX	64	83	73	67	415	426	549	184	41	126	851	1630
MIN	28	58	57	56	62	81	59	41	25	33	83	107
AC-FT	2680	3870	3930	3710	9640	9860	11090	5780	1920	2560	18710	21920

CAL YR 1987 TOTAL 49842 MEAN 137 MAX 762 MIN 20 AC-FT 98860
WTR YR 1988 TOTAL 48234 MEAN 132 MAX 1630 MIN 25 AC-FT 95670

09444200 BLUE RIVER NEAR CLIFTON, AZ

LOCATION.--Lat 33°17'27", long 109°11'44", in sec.6, T.2 S., R.31 E. (unsurveyed), Greenlee County, Hydrologic Unit 15040004, in Apache National Forest, on right bank 0.1 mi downstream from county road crossing, 0.9 mi upstream from Clear Creek, 8 mi upstream from mouth, and 17 mi northeast of Clifton.

DRAINAGE AREA.--506 mi^2.

PERIOD OF RECORD.--November 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--20 years (water years 1969-88), 80.4 ft^3/s, 58,250 acre-ft/yr; median of yearly mean discharges, 50 ft^3/s, 36,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 30,000 ft^3/s Oct. 20, 1972, gage height, 22.56 ft, from rating curve extended above 960 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 1.4 ft^3/s Oct. 18-20, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 7	1715	2,090	9.22	Aug. 18	1945	967	7.63
Aug. 14	1930	1,240	8.07	Aug. 31	0830	*6,410	*13.08

Minimum daily discharge, 6.2 ft^3/s July 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	48	17	23	36	218	65	153	19	e8.0	33	268
2	12	111	15	23	36	199	59	143	17	e8.0	27	222
3	10	44	16	22	181	175	53	132	e15	e7.4	67	189
4	10	30	16	22	229	154	50	119	e15	e7.4	83	159
5	9.5	28	16	22	320	138	47	108	e15	e7.2	98	137
6	9.4	90	17	23	210	136	44	102	e14	7.2	110	116
7	9.2	40	17	28	171	134	43	97	e14	6.8	200	102
8	9.3	36	18	28	145	131	43	94	e13	6.8	99	87
9	9.5	33	18	26	130	123	43	85	e13	21	91	75
10	9.1	32	17	26	126	116	43	74	e13	23	86	60
11	8.7	31	17	25	116	111	44	70	e13	17	71	46
12	8.8	29	16	25	115	103	43	61	e13	12	58	269
13	8.6	26	17	25	114	97	42	54	e13	9.5	49	145
14	9.3	21	17	24	117	89	55	50	e13	8.7	111	107
15	9.2	32	15	24	115	83	61	47	e13	7.7	100	91
16	10	29	14	24	111	80	202	44	e12	7.1	144	78
17	9.9	23	22	26	109	81	306	39	e11	6.7	94	63
18	9.9	21	65	94	108	73	265	38	e11	18	140	53
19	10	20	33	45	103	68	217	39	e9.7	10	109	47
20	10	19	35	35	97	63	210	37	e9.5	29	101	48
21	11	19	29	30	89	59	191	37	e9.6	18	114	49
22	11	19	25	29	85	57	191	37	e9.5	8.2	86	60
23	12	19	24	28	84	56	182	37	e9.4	7.1	123	43
24	13	17	24	30	88	56	184	38	e9.1	6.6	99	37
25	14	17	25	31	98	59	176	39	e8.9	6.4	79	33
26	14	19	25	31	116	61	160	36	e8.8	7.8	53	29
27	15	19	22	32	183	65	149	28	e8.3	6.2	45	27
28	18	16	22	33	222	70	142	21	e8.3	14	75	24
29	18	16	23	33	220	71	164	19	e8.1	13	114	23
30	18	17	23	33	---	69	164	19	e8.1	78	87	22
31	18	---	23	35	---	66	---	20	---	24	593	---
TOTAL	356.4	921	683	935	3874	3061	3638	1917	354.3	417.8	3339	2709
MEAN	11.5	30.7	22.0	30.2	134	98.7	121	61.8	11.8	13.5	108	90.3
MAX	18	111	65	94	320	218	306	153	19	78	593	269
MIN	8.6	16	14	22	36	56	42	19	8.1	6.2	27	22
AC-FT	707	1830	1350	1850	7680	6070	7220	3800	703	829	6620	5370

CAL YR 1987 TOTAL 25662.4 MEAN 70.3 MAX 482 MIN 6.3 AC-FT 50900
WTR YR 1988 TOTAL 22205.5 MEAN 60.7 MAX 593 MIN 6.2 AC-FT 44040

e Estimated

09444500 SAN FRANCISCO RIVER AT CLIFTON, AZ

LOCATION.--Lat 33°02'58", long 109°17'43", in SW¼SE¼ sec.30, T.4 S., R.30 E., Greenlee County, Hydrologic Unit 15040004, on downstream side of right pier at Railroad Boulevard Bridge (U.S. Highway 666), at Clifton, 9.9 mi upstream from mouth.

DRAINAGE AREA.--2,766 mi^2, of which 2 mi^2 is noncontributing.

PERIOD OF RECORD.--October 1910 to March 1911, July 1911 to June 1912, September 1912, November 1912 to March 1913, May 1913 to July 1918, July 1927 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "San Francisco River at dam above Clifton" in 1911 and under both names in 1912.

REVISED RECORDS.--WSP 1049: 1911, 1913-15, 1917. WSP 1283: Drainage area. WSP 1313: 1927-30(M), 1932(M), 1934(M). WRD Ariz. 1972: 1917(M).

GAGE.--Water-stage recorder. Datum of gage is 3,436.16 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Apr. 7, 1959. Apr. 7, 1959, to Mar. 23, 1961, at site 1,140 ft downstream at datum 5.37 ft lower. July 18, 1980 to July 28, 1983, supplementary water-stage recorder 0.4 mi upstream on right bank at same datum and June 15, 1981 to Sept. 30, 1983, crest-stage gages at site. Since Aug. 4, 1983, supplementary water-stage recorder on right bank at main gage site at same datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for mining, municipal use, and for irrigation of about 2,700 acres above station.

AVERAGE DISCHARGE.--64 years (water years 1914-15, 1917, 1928-88) 213 ft^3/s, 154,300 acre-ft/yr; median of yearly mean discharges, 130 ft^3/s, 94,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,900 ft^3/s Oct. 2, 1983, gage height, 19.72 ft, from high-water mark, from rating curve extended above 30,000 ft^3/s on basis of slope-area measurement at gage height 17.0 ft; minimum daily, 6.1 ft^3/s June 21, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 11	0130	2,210	4.42	Aug. 31	1415	*3,630	*5.27
Aug. 24	0300	2,280	4.47	Sept. 12	0900	2,880	4.85

Minimum daily discharge, 47 ft^3/s July 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	97	101	125	161	788	182	427	89	70	145	1750
2	78	164	102	125	165	788	179	407	86	75	222	2110
3	76	156	102	124	237	708	172	377	81	71	271	1880
4	72	131	103	123	611	611	165	340	79	64	243	1160
5	71	117	104	125	1170	525	162	302	77	65	562	784
6	67	139	107	128	1120	469	153	274	77	55	635	614
7	65	153	107	137	769	446	150	252	73	60	823	496
8	66	128	105	141	609	431	150	236	71	59	641	414
9	61	118	105	142	514	416	147	216	70	67	526	353
10	64	115	103	139	454	383	141	200	68	72	443	304
11	65	113	98	136	412	360	139	180	65	81	885	258
12	65	109	100	135	379	335	137	170	60	81	455	1160
13	65	107	109	136	357	306	139	175	65	74	325	1100
14	71	107	116	136	337	290	156	175	66	63	364	724
15	72	113	109	136	329	261	183	171	67	59	650	522
16	74	127	105	137	323	240	320	168	68	48	943	410
17	75	120	110	138	314	233	660	163	92	47	746	341
18	75	110	244	289	310	224	1010	161	66	59	675	290
19	73	106	286	316	304	211	796	159	65	94	794	252
20	72	103	219	230	293	201	950	164	61	66	691	239
21	72	103	212	190	272	192	893	154	61	86	841	370
22	72	103	171	169	254	183	787	135	58	75	849	594
23	78	103	158	161	243	176	719	122	56	67	618	420
24	86	103	150	159	238	172	674	113	55	54	1240	336
25	87	103	143	160	245	165	627	107	58	60	760	277
26	86	103	144	156	272	160	545	109	52	60	567	233
27	84	103	144	153	352	159	472	105	49	67	505	210
28	80	103	133	153	607	167	428	102	68	89	544	188
29	74	103	127	154	789	171	451	95	74	70	769	171
30	78	103	126	156	---	179	449	90	72	110	611	158
31	84	---	125	159	---	180	---	89	---	157	1480	---
TOTAL	2289	3463	4168	4868	12440	10120	12136	5938	2049	2225	19823	18123
MEAN	73.8	115	134	157	429	326	405	192	68.3	71.8	639	604
MAX	87	164	286	316	1170	788	1010	427	92	157	1480	2110
MIN	61	97	98	123	161	159	137	89	49	47	145	158
AC-FT	4540	6870	8270	9660	24670	20070	24070	11780	4060	4410	39320	35950

CAL YR 1987 TOTAL 87733 MEAN 240 MAX 1190 MIN 44 AC-FT 174000
WTR YR 1988 TOTAL 97642 MEAN 267 MAX 2110 MIN 47 AC-FT 193700

09444600 SAN FRANCISCO RIVER NEAR CLIFTON, AZ

LOCATION.--Lat 33°00'26", long 109°18'52", in NE¼SW¼SE¼ sec.12, T.5 S., R.29, E., Greenlee County, Hydrologic Unit 15040004, 2.9 mi downstream from Clifton sewage treatment facility, 3.3 mi south of Clifton, and 5.7 mi upstream from mouth.

DRAINAGE AREA.--2,770 mi^2, approximately.

PERIOD OF RECORD.--January 1976 to September 1979, October 1980 to March 1984, October 1986 to September 1988 (discontinued).

REMARKS.--Streamflow ungaged. Gaging station 09444500 San Francisco River at Clifton located 2.2 mi upstream. Prior to October 1986, samples taken at site 2.0 mi upstream; records equivalent.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1987											
21...	1530	69	1500	8.60	--	21.0	2.8	670	8.4	108	61
NOV											
17...	1500	121	1020	8.10	14.0	15.0	8.5	655	9.9	115	35
DEC											
22...	1030	164	830	8.30	--	7.0	17	675	10.8	101	<10
JAN 1988											
14...	1130	138	990	8.20	--	8.0	4.5	675	10.9	104	<10
FEB											
25...	1100	246	695	8.20	24.0	12.0	14	675	9.2	97	20
MAR											
24...	1000	171	755	8.40	--	14.0	4.7	675	9.2	101	120
APR											
20...	1130	962	365	--	27.0	17.0	180	686	8.5	98	19
MAY											
[illegible]...	1000	165	780	8.50	30.0	25.0	0.60	684	8.1	110	240
[illegible]											
14...	1000	64	1400	8.40	33.0	22.0	1.2	690	8.6	109	13
JUL											
12...	1100	73	1270	8.30	36.0	28.0	4.1	688	6.7	96	19
AUG											
24...	1200	1040	260	8.20	35.0	22.5	1500	690	9.2	118	38
SEP											
14...	1100	759	386	--	30.0	22.0	300	690	9.5	121	20

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT 1987											
21...	K4	16	250	98	82	12	180	5	12	170	18
NOV											
17...	K4	100	210	48	63	12	110	3	7.4	205	0
DEC											
22...	K12	--	190	43	58	12	90	3	6.4	188	0
JAN 1988											
14...	<1	K8	210	40	64	12	110	3	7.8	182	0
FEB											
25...	K16	80	170	12	49	11	72	3	4.6	187	0
MAR											
24...	K3	52	180	21	53	11	86	3	5.2	166	4
APR											
20...	K840	K4400	120	0	33	8.7	31	1	2.6	--	--
MAY											
17...	12	160	170	25	50	9.8	90	3	4.6	157	6
JUN											
14...	K36	90	240	90	78	12	170	5	10	201	5
JUL											
12...	20	150	230	79	71	.2	160	5	9.8	185	12
AUG											
24...	K400	10000	70	0	20	4.9	17	0.9	2.7	99	0
SEP											
14...	2000	2900	110	0	33	7.7	33	1	3.2	--	--

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09444600 SAN FRANCISCO RIVER NEAR CLIFTON, AZ--Continued

WATER QUALITY DATA

DATE	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 1987										
21...	169	34	410	0.80	823	825	1.12	8	<0.100	<0.010
NOV										
17...	168	26	180	0.70	563	496	0.77	27	<0.100	0.020
DEC										
22...	154	25	150	0.50	483	433	0.66	35	<0.100	0.020
JAN 1988										
14...	149	28	190	0.60	551	514	0.75	10	<0.100	<0.010
FEB										
25...	153	21	110	0.40	402	362	0.55	21	<0.100	<0.010
MAR										
24...	142	25	140	0.40	456	415	0.62	<1	<0.100	<0.010
APR										
20...	--	18	30	0.40	235	199	0.32	826	<0.100	0.080
MAY										
17...	138	28	150	0.60	454	417	0.62	7	<0.100	0.030
JUN										
14...	173	40	340	0.90	839	744	1.14	1	<0.100	0.050
JUL										
12...	171	31	300	0.70	739	673	1.01	16	<0.100	0.020
AUG										
24...	81	17	16	0.30	178	136	0.24	3500	0.200	0.100
SEP										
14...	--	17	44	0.30	254	207	0.35	828	<0.100	0.040

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	NITRO- GEN, TOTAL (MG/L AS NO3) (71887)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)
OCT 1987										
21...	--	0.60	--	--	0.080	0.08	3	3	65	110
NOV										
17...	0.38	0.40	--	--	0.070	0.07	2	3	47	80
DEC										
22...	--	<0.20	--	--	0.130	0.13	3	2	34	50
JAN 1988										
14...	--	17	--	--	0.010	0.01	3	2	39	60
FEB										
25...	--	0.50	--	--	0.080	0.08	2	2	30	50
MAR										
24...	--	0.20	--	--	0.080	0.06	2	2	34	60
APR										
20...	0.52	0.60	--	--	0.180	0.18	2	2	26	20
MAY										
17...	--	<0.20	--	--	0.070	0.07	5	2	32	60
JUN										
14...	0.15	0.20	--	--	0.050	0.05	2	2	64	100
JUL										
12...	1.9	1.9	--	--	0.070	0.07	3	4	100	90
AUG										
24...	0.20	0.30	0.50	2.2	0.170	0.17	3	2	12	30
SEP										
14...	0.36	0.40	--	--	0.460	0.46	2	2	19	30

< Actual value is known to be less than value shown.

09444600 SAN FRANCISCO RIVER NEAR CLIFTON, AZ--Continued

WATER QUALITY DATA

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT 1987										
21...	<1	<1	<1	2	9	5	300	6	<5	<5
NOV										
17...	1	<1	3	1	24	6	750	3	<5	<5
DEC										
22...	<1	<1	3	2	150	25	1900	11	<5	<5
JAN 1988										
14...	2	<1	38	1	12	7	460	6	<5	<5
FEB										
25...	1	<1	3	1	26	8	1400	21	<5	<5
MAR										
24...	3	2	1	<1	11	4	540	8	<5	<5
APR										
20...	1	<1	19	1	130	41	24000	520	16	<5
MAY										
17...	1	<1	2	1	8	6	140	8	<5	<5
JUN										
14...	2	1	1	<1	12	4	240	5	<5	<5
JUL										
12...	<1	1	3	1	15	5	2000	<10	<5	<5
AUG										
24...	<1	<1	80	<1	360	7	87000	190	68	<5
SEP										
14...	<1	<1	15	<1	58	5	19000	100	11	<5

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1987										
21...	30	12	0.10	<1	<1	<1.0	<10	<3	14	2.6
NOV										
17...	50	6	<0.10	1	1	<1.0	<10	<3	30	9.8
DEC										
22...	70	7	<0.10	<1	<1	<1.0	10	<3	1550	686
JAN 1988										
14...	30	5	--	<1	<1	<1.0	<10	<3	32	12
FEB										
25...	60	4	<0.10	<1	<1	<1.0	10	6	130	86
MAR										
24...	20	4	<0.10	<1	1	<1.0	40	6	50	23
APR										
20...	700	82	<0.10	<1	<1	<1.0	70	34	1550	4030
MAY										
17...	20	3	<0.10	<1	<1	<1.0	20	11	19	8.5
JUN										
14...	30	8	<0.10	<1	<1	1.0	<10	<3	58	10
JUL										
12...	100	<10	<0.10	<1	<1	1.0	40	<10	5	0.99
AUG										
24...	3900	6	0.10	<1	<1	<1.0	390	6	7230	20300
SEP										
14...	840	6	0.10	<1	<1	<1.0	80	5	1630	3340

< Actual value is known to be less than value shown.

09445000 WILLOW CREEK DIVERSION FROM BLACK RIVER, NEAR MORENCI, AZ

LOCATION.--Lat 33°24'46", long 109°43'08", in SW¼ sec.23, T.1 N., R.25 E. (unsurveyed), Graham County, Hydrologic Unit 15040005, in San Carlos Indian Reservation, on left bank just downstream from end of diversion pipeline, 3.6 mi northeast of Point of Pines, 5.0 mi southeast of pumping plant on Black River, and 29 mi northwest of Morenci.

PERIOD OF RECORD.--April 1945 to current year.

GAGE.--Water-stage recorder and steel-edged rectangular weir. Datum of gage is 5,957.16 ft above National Geodetic Vertical Datum of 1929. Prior to June 26, 1946, at end of pipeline at that time, 3.5 mi upstream at datum about 50 ft higher.

REMARKS.--No estimated daily discharges. Records good. The entire flow consists of Black River (head of Salt River) water which is pumped into headwater of Willow Creek (tributary of Eagle Creek) for industrial and municipal supply in vicinity of Morenci.

AVERAGE DISCHARGE.--43 years, 11.6 ft^3/s, 8,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 28 ft^3/s May 18, 19, 21-26, 1970; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	15	15	9.5	13	15	14	17	19	18	12
2	15	12	14	15	9.5	13	14	13	9.5	19	18	13
3	15	13	15	15	9.4	14	14	13	16	19	19	13
4	15	14	15	15	9.0	14	14	13	17	19	18	13
5	15	14	15	15	7.6	14	14	13	17	19	15	13
6	15	13	15	15	9.2	14	14	14	17	18	17	14
7	15	12	15	15	9.2	11	14	14	18	10	17	14
8	15	13	15	15	9.2	14	14	14	18	18	18	14
9	15	14	15	13	9.2	14	14	14	10	17	16	14
10	15	14	15	11	9.3	14	14	14	17	18	18	14
11	15	14	15	14	9.5	14	14	7.5	15	18	10	14
12	15	15	14	14	9.5	14	14	14	14	19	17	14
13	14	15	15	14	9.5	14	14	13	14	19	18	14
14	15	15	13	14	9.5	14	15	13	14	19	18	14
15	15	15	15	14	9.5	14	17	13	14	19	16	14
16	15	15	15	14	9.5	14	17	13	14	19	17	14
17	15	15	13	14	9.5	14	18	13	14	19	18	14
18	15	15	14	13	9.5	13	18	13	14	17	18	14
19	15	15	15	14	9.5	14	17	13	14	18	15	4.3
20	15	15	14	6.9	9.5	14	17	13	14	18	14	.00
21	15	15	14	9.5	9.5	14	17	13	14	19	14	.00
22	15	15	14	9.5	9.5	14	18	13	14	19	13	.00
23	15	15	14	9.5	9.5	14	17	13	14	19	14	8.5
24	15	15	14	9.6	9.5	14	17	13	14	18	14	14
25	15	15	6.5	9.5	9.5	14	17	13	14	18	14	14
26	14	15	7.1	9.5	9.5	14	17	13	14	18	14	14
27	15	7.4	11	9.4	9.3	14	17	13	14	18	14	14
28	15	15	14	9.4	12	14	17	13	16	16	14	13
29	15	15	14	9.4	13	17	11	13	19	17	14	14
30	15	14	14	9.4	---	9.9	16	13	13	18	14	13
31	15	---	14	9.5	---	17	---	16	---	17	13	---
TOTAL	463	423.4	428.6	380.1	277.4	429.9	466	407.5	443.5	558	489	354.80
MEAN	14.9	14.1	13.8	12.3	9.57	13.9	15.5	13.1	15.0	18.0	15.8	11.8
MAX	15	15	15	15	13	17	18	16	19	19	19	14
MIN	14	7.4	6.5	6.9	7.6	9.9	11	7.5	9.5	10	10	.00
AC-FT	918	840	850	754	550	853	924	808	892	1110	970	704

CAL YR 1987 TOTAL 4883.24 MEAN 13.4 MAX 22 MIN .04 AC-FT 9690
WTR YR 1988 TOTAL 5127.20 MEAN 14.0 MAX 19 MIN .00 AC-FT 10170

09447000 EAGLE CREEK ABOVE PUMPING PLANT, NEAR MORENCI, AZ

LOCATION (REVISED).--Lat 33°03'52", long 109°26'30", in SW¼SE¼ sec.23, T.4 S., R.28 E., Greenlee County, Hydrologic Unit 15040005, on right bank 2 mi upstream from Phelps Dodge Corp. pumping plant, 5 mi west of Morenci, and 12 mi upstream from mouth.

DRAINAGE AREA.--622 mi^2 (revised).

PERIOD OF RECORD.--April 1944 to current year.

REVISED RECORDS.--WSP 1850-C: 1966.

GAGE.--Water-stage recorder. Datum of gage is 3,673.5 ft above National Geodetic Vertical Datum of 1929. Oct. 25, 1984 to Mar. 6, 1986, at site 1 mi upstream at datum 24.1 ft higher. Prior to Oct. 25, 1984, at various sites within 1 mi upstream from present site at different datums. Aug. 23, 1950 to Aug. 1, 1981, supplementary gages at various sites within 1 mi upstream from present site at different datums.

REMARKS.--No estimated daily discharges. Records fair. Diversions above station for irrigation of about 500 acres, mostly above Willow Creek. Water from Black River was pumped into Eagle Creek basin, 52 mi upstream from this station, for the entire year and water was pumped from wells into Eagle Creek near Double Circle Ranch below Willow Creek for 7 months. The monthly quantities pumped are shown in table below. Diversion by pumping for industrial and municipal use in and near Morenci and Clifton are made from Eagle Creek, 3 mi downstream from this station and from San Francisco River near Clifton. Monthly quantities diverted are shown in the table below; 98 percent of the pumpage was from Eagle Creek.

AVERAGE DISCHARGE (unadjusted).--44 years, 58.7 ft^3/s, 42,530 acre-ft/yr; median of yearly mean discharges, 38 ft^3/s, 27,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,400 ft^3/s Oct. 2, 1983, gage height, 13.04 ft, from rating curve extended above 730 ft^3/s on basis of slope-area measurements at gage heights 10.5 ft and 13.04 ft; minimum, 2.9 ft^3/s June 25, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*)

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 12	0245	913	5.27	Aug. 15	2100	*3,770	*7.25
Aug. 2	0830	913	5.27	Aug. 21	0315	871	5.23

Minimum daily discharge, 27 ft^3/s Oct. 4-11, Nov. 29, Dec. 16, 29, May 28-30, June 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	42	31	31	38	50	38	101	29	48	116	147
2	28	46	30	32	39	52	41	85	30	36	169	106
3	28	39	30	32	41	53	41	75	31	36	227	118
4	27	33	30	32	97	53	41	72	28	36	146	74
5	27	31	31	33	284	50	36	72	29	38	261	64
6	27	88	33	33	251	47	38	61	33	37	128	57
7	27	58	32	34	150	45	38	58	33	44	155	48
8	27	41	31	35	111	42	39	54	34	46	90	48
9	27	34	31	35	90	42	38	48	34	56	64	46
10	27	32	31	34	79	43	38	45	35	62	57	44
11	27	31	32	34	70	42	38	43	30	49	54	43
12	28	31	31	33	62	42	38	42	30	190	51	198
13	28	30	32	33	61	41	38	39	31	59	46	80
14	30	30	33	33	59	41	42	40	29	49	47	58
15	31	30	30	33	57	42	45	40	29	47	525	52
16	31	30	27	34	55	42	60	40	29	45	679	49
17	30	30	29	34	53	42	91	39	30	45	142	48
18	29	30	46	42	52	41	146	40	31	48	98	45
19	30	30	41	44	51	40	124	39	33	52	155	42
20	30	29	42	42	48	40	113	40	30	51	145	43
21	29	29	40	39	45	39	99	38	28	49	369	39
22	30	29	38	35	44	38	96	36	28	40	172	36
23	33	29	37	35	43	39	98	35	28	37	106	34
24	36	28	36	34	42	40	109	34	27	31	75	29
25	37	28	37	34	41	40	103	34	31	31	68	28
26	37	28	37	31	42	40	99	33	34	30	60	33
27	36	28	32	33	42	40	91	31	31	28	54	33
28	36	28	28	35	43	39	92	27	38	30	58	33
29	37	27	27	37	47	39	96	27	35	51	74	33
30	36	30	28	37	---	41	108	27	34	47	60	33
31	38	---	30	37	---	41	---	28	---	87	104	---
TOTAL	953	1029	1023	1080	2137	1326	2114	1423	932	1535	4555	1741
MEAN	30.7	34.3	33.0	34.8	73.7	42.8	70.5	45.9	31.1	49.5	147	58.0
MAX	38	88	46	44	284	53	146	101	38	190	679	198
MIN	27	27	27	31	38	38	36	27	27	28	46	28
AC-FT	1890	2040	2030	2140	4240	2630	4190	2820	1850	3040	9030	3450
(*)	684	201	159	0	0	352	807	790	902	909	760	848
(**)	1450	1440	1560	1420	1210	1680	1700	1470	1460	1840	1780	1430

CAL YR 1987 TOTAL 18765 MEAN 51.4 MAX 492 MIN 26 AC-FT 37220 * 4781 ** 15780
WTR YR 1988 TOTAL 19848 MEAN 54.2 MAX 679 MIN 27 AC-FT 39370 * 6412 ** 18440

* Pumpage, in acre-feet, into Eagle Creek from Eagle Creek Wells.
** Pumpage, in acre-feet, to Clifton and Morenci, from San Francisco River and Eagle Creek.

09447800 BONITA CREEK NEAR MORENCI, AZ

LOCATION.--Lat 32°57'20", long 109°31'50", in SE¼NW¼ sec.36, T.5 S., R.27 E., Graham County, Hydrologic Unit 15040005, on left bank 2.0 mi upstream from intake of City of Safford water supply, 6.3 mi upstream from mouth, and 12.8 mi southwest of Morenci.

DRAINAGE AREA.--302 mi^2.

PERIOD OF RECORD.--August 1981 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Two crest-stage gages 440 ft upstream on right and left banks.

REMARKS.--No estimated daily discharges. Records fair.

AVERAGE DISCHARE.--7 years, 10.4 ft^3/s, 7,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,400 ft^3/s Oct. 2, 1983, gage height, 17.3 ft, from rating curve extended above 560 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 0.66 ft^3/s Aug. 31, 1988.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 20, 1972, 10,000 ft^3/s, from slope-area measurement made by City of Safford at site about 2 mi downstream. Flood of June 27, 1981, 1,340 ft^3/s, from slope-area measurement at present site, gage height, 5.6 ft, from floodmark.

EXTREMES FOR CURRENT PERIOD.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 29	2015	483	4.14	Aug. 6	1545	517	4.21
Aug. 2	0845	676	4.53	Sept. 12	0715	*798	*4.75

Minimum daily discharge, 0.66 ft^3/s Aug. 31.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	2.4	3.4	6.7	5.3	3.1	3.9	4.3	2.7	2.2	6.6	.67
2	2.3	2.5	3.4	6.6	5.0	3.3	3.9	4.5	2.5	2.2	61	5.3
3	2.4	2.6	3.3	6.7	5.0	3.2	3.9	4.2	2.5	2.2	7.4	5.5
4	2.3	2.8	3.3	6.2	5.7	3.3	3.8	4.1	2.5	2.2	3.4	2.4
5	2.3	2.6	3.3	5.4	51	3.2	3.7	4.1	2.5	2.2	2.6	1.8
6	2.3	2.5	3.6	4.5	31	3.2	3.7	4.1	2.5	2.2	41	1.5
7	2.3	2.6	3.6	4.8	10	3.2	3.6	4.2	2.5	2.1	5.0	1.3
8	2.3	2.5	3.5	5.0	7.1	3.2	3.6	4.1	2.4	2.1	4.5	1.2
9	2.3	2.5	3.7	5.0	5.9	3.3	3.6	4.0	2.4	2.1	1.9	1.1
10	2.3	2.7	3.6	5.1	4.8	3.5	3.8	3.8	2.4	2.2	1.3	1.1
11	2.3	2.7	3.6	5.1	4.2	3.6	3.8	3.6	2.4	2.2	1.1	1.0
12	2.3	2.8	3.9	5.2	4.0	3.7	3.9	3.5	2.3	2.1	.94	96
13	2.4	2.6	5.8	5.1	3.9	3.6	3.9	3.5	2.3	2.1	.85	7.1
14	2.3	3.0	5.7	4.9	3.8	3.6	4.7	3.4	2.3	2.1	.81	4.2
15	2.2	2.9	5.6	5.0	3.9	3.8	4.6	3.4	2.2	2.1	.79	3.5
16	2.2	3.0	5.7	4.9	3.8	3.6	6.1	3.3	2.2	2.1	1.6	3.3
17	2.2	3.1	6.9	5.0	3.7	3.6	6.2	3.3	2.2	2.1	.98	3.1
18	2.2	3.1	7.2	6.3	3.7	3.6	19	3.3	2.3	2.2	.87	3.2
19	2.0	3.1	5.8	6.4	3.8	3.5	8.0	3.3	2.2	2.2	1.1	3.3
20	2.2	3.2	5.9	6.4	3.6	3.6	5.9	3.3	2.2	2.2	1.4	3.5
21	2.2	3.2	5.8	6.4	3.6	3.6	5.2	3.2	2.2	2.2	30	3.5
22	2.2	3.2	5.7	6.3	3.6	3.5	5.1	3.1	2.2	2.2	1.7	3.5
23	2.3	3.2	6.1	6.4	3.4	3.4	4.7	3.1	2.2	2.2	1.5	3.5
24	2.3	3.1	6.4	6.2	3.4	3.4	4.5	3.0	2.2	2.2	1.2	3.4
25	2.3	3.2	7.0	6.3	3.4	3.4	4.3	2.8	2.2	2.2	.97	3.2
26	2.3	3.3	6.8	6.1	3.1	3.3	4.2	2.7	2.2	2.2	.86	3.2
27	2.3	3.4	6.9	5.9	3.0	3.4	4.1	2.7	2.2	2.2	.89	3.2
28	2.2	3.5	6.9	5.8	3.1	3.4	4.7	2.7	2.2	2.2	.82	3.2
29	2.2	3.5	6.8	5.6	3.0	3.5	5.8	2.7	2.2	26	.74	3.2
30	2.2	3.5	6.7	5.1	---	3.8	4.6	2.7	2.2	6.9	.69	3.2
31	2.3	---	6.8	5.3	---	3.8	---	2.7	---	2.5	.66	---
TOTAL	70.2	88.3	162.7	175.7	198.8	107.2	150.8	106.7	69.5	96.1	185.17	183.17
MEAN	2.26	2.94	5.25	5.67	6.86	3.46	5.03	3.44	2.32	3.10	5.97	6.11
MAX	2.4	3.5	7.2	6.7	51	3.8	19	4.5	2.7	26	61	96
MIN	2.0	2.4	3.3	4.5	3.0	3.1	3.6	2.7	2.2	2.1	.66	.67
AC-FT	139	175	323	349	394	213	299	212	138	191	367	363

CAL YR 1987 TOTAL 2139.2 MEAN 5.86 MAX 177 MIN 2.0 AC-FT 4240
WTR YR 1988 TOTAL 1594.34 MEAN 4.36 MAX 96 MIN .66 AC-FT 3160

09448500 GILA RIVER AT HEAD OF SAFFORD VALLEY, NEAR SOLOMON, AZ

LOCATION.--Lat 32°52'06", long 109°30'38", in SE¼NE¼ sec.31, T.6 S., R.28 E., Graham County, Hydrologic Unit 15040005, on left bank 0.6 mi downstream from intake of Brown Canal, 8 mi northeast of Solomon, and 17 mi downstream from San Francisco River. Records include flow of Brown Canal, which is measured 2,000 ft downstream from intake.

DRAINAGE AREA.--7,896 mi^2.

PERIOD OF RECORD.--April 1914 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1932 and October 1940 to September 1949 published as "near Solomonsville" and October 1932 to October 1933 and May 1935 to September 1940 as "below Bonita Creek near Solomonsville."

REVISED RECORDS.--WSP 1059: 1914, 1916-17, 1923(M), 1924-25, 1927, 1929-31(M). WSP 1179: 1915, 1918-19(M). WSP 1313: 1934. WSP 1733: 1923.

GAGE.--Water-stage recorder. Datum of gage is 3,059.92 ft above National Geodetic Vertical Datum of 1929. Prior to July 8, 1980, at datum 4.96 ft higher. See WSP 1733 for history of changes prior to Jan. 1, 1941. Supplementary water-stage recorder and Parshall flume on Brown Canal.

REMARKS.--Records good except for estimated daily discharges, Jan. 19-27, which are poor. Records show water reaching head of Safford Valley and include water diverted to Brown Canal. Diversions above station for mining, municipal use, and for irrigation of about 17,500 acres, much of it by pumping from ground water.

COOPERATION.--Record for Brown Canal furnished by Gila Water Commissioner.

AVERAGE DISCHARGE.--74 years, 483 ft^3/s, 349,900 acre-ft/yr; median of yearly mean discharges, 340 ft^3/s, 246,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 132,000 ft^3/s Oct. 2, 1983, gage height, 20.8 ft, from rating curve extended above 52,000 ft^3/s on basis of slope-area measurements at 14.40 ft and 20.8 ft; minimum, 11 ft^3/s June 25, 1956.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 17	1315	5,050	10.02	Sept. 23	0845	*7,820	*11.02
Sept. 3	0300	4,490	9.80				

Minimum daily discharge, 116 ft^3/s June 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	243	199	216	271	353	1270	372	729	181	138	455	3060
2	190	381	205	277	367	1200	374	698	174	136	521	3760
3	168	328	197	285	389	1180	368	675	167	140	988	4210
4	156	265	195	282	700	1110	357	630	166	136	1070	3380
5	147	234	200	281	1560	1020	361	589	170	134	1120	1970
6	136	241	203	287	2000	915	336	534	169	132	1270	1480
7	e133	361	206	296	1550	852	311	487	165	130	1450	1250
8	e131	313	205	323	1200	810	300	467	162	136	1320	1050
9	e128	267	204	331	1020	815	296	439	154	136	1250	900
10	e125	250	203	330	921	803	293	410	150	163	1380	781
11	e124	242	201	319	853	768	285	381	148	333	1550	687
12	e132	233	198	311	815	729	281	355	143	399	1100	1340
13	e133	236	217	301	792	665	283	337	137	323	830	1580
14	e131	232	222	302	766	620	300	329	137	244	666	1130
15	131	237	228	301	750	579	349	331	135	209	1050	902
16	131	235	224	304	733	530	409	317	136	193	3140	769
17	135	248	228	302	715	497	736	309	137	186	4680	675
18	132	231	321	308	701	477	1180	297	151	183	3340	600
19	130	223	500	e418	708	454	1070	294	135	222	2100	523
20	127	223	396	e453	700	433	1180	294	128	216	2010	486
21	126	226	396	e410	647	400	1200	297	125	214	2450	603
22	126	232	377	e367	615	383	1140	283	123	250	2980	4050
23	132	224	349	e347	583	372	1090	e264	120	231	1720	6060
24	142	221	331	e337	549	360	1020	e250	119	188	2150	2660
25	149	217	328	e334	541	348	968	e238	121	168	1610	1500
26	157	218	330	e331	557	339	874	e225	123	164	1390	1290
27	158	232	336	e334	628	332	795	e213	117	157	1170	1110
28	154	237	326	339	820	335	731	e201	116	223	1080	975
29	155	242	295	346	1160	329	749	194	132	180	1350	863
30	157	229	291	351	---	334	748	186	136	179	1840	782
31	171	---	272	353	---	354	---	182	---	213	2310	---
TOTAL	4490	7457	8400	10131	23693	19613	18756	11435	4277	6056	51340	50426
MEAN	145	249	271	327	817	633	625	369	143	195	1656	1681
MAX	243	381	500	453	2000	1270	1200	729	181	399	4680	6060
MIN	124	199	195	271	353	329	281	182	116	130	455	486
AC-FT	8910	14790	16660	20090	47000	38900	37200	22680	8480	12010	101800	100000

CAL YR 1987 TOTAL 162586 MEAN 445 MAX 1510 MIN 69 AC-FT 322500
WTR YR 1988 TOTAL 216074 MEAN 590 MAX 6060 MIN 116 AC-FT 428600

e Estimated

09458200 DEADMAN CREEK NEAR SAFFORD, AZ

LOCATION.--Lat 32°43'59", long 109°48'57", in SW¼ sec.17, T.8 S., R.25 E., (unsurveyed), Graham County, in Coronado National Forest, on left bank 9 mi southwest of Safford.

DRAINAGE AREA.--4.78 mi^2.

PERIOD OF RECORD.--November 1966 to September 1976, August 1986 to May 1988, September 1988.

GAGE.--Water-stage recorder and sharp-crested V-notch weir. Elevation of gage is 4,950 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion above station. City of Safford diverts water about 1,000 ft downstream for municipal supply.

AVERAGE DISCHARGE.--10 years (1967-76, 1987), 1.41 ft^3/s, 1,020 acre-ft/yr; median of yearly mean discharges, 1.0 ft^3/s, 720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, [illegible] ft^3/s, Oct. 19, 1972, gage height, 3.45 ft, from rating curve extended above 18 ft^3/s on basis of computation of flow over weir at gage height 3.25 ft; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 19, 1978 reached a discharge of 2,760 ft^3/s, from slope-area measurement ¼ mi downstream from station.

EXTREMES FOR CURRENT PERIOD.--October 1987 to May 1988 and September 1988: Maximum discharge during period, 26 ft^3/s, Feb. 4, gage height, 2.53 ft; minimum daily, 0.10 ft^3/s Oct. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	1.7	.28	.57	.85	2.4	1.2	3.6	---	---	---	e.35
2	.14	.85	.25	.54	1.2	2.1	1.1	3.3	---	---	---	e.40
3	.13	.54	.24	.48	2.7	1.9	1.0	2.9	---	---	---	e.40
4	.14	.46	.24	.60	8.7	1.7	.94	2.6	---	---	---	e.35
5	.13	.49	.30	1.4	12	1.6	.90	2.2	---	---	---	e.35
6	.12	.53	.28	2.5	4.5	1.5	.91	2.8	---	---	---	e.35
7	.11	.46	.25	1.4	2.9	1.4	.96	3.4	---	---	---	e.35
8	.10	.41	.24	1.0	2.3	1.3	1.2	---	---	---	---	e.35
9	.11	.38	.24	.79	2.0	1.2	1.7	---	---	---	---	.34
10	.12	.40	.24	.68	1.8	1.2	1.8	---	---	---	---	.36
11	.12	.41	.24	.61	1.6	1.1	1.7	---	---	---	---	.31
12	.11	.36	.23	.57	1.4	1.0	1.6	---	---	---	---	.87
13	.25	.32	.39	.52	1.3	.97	1.7	---	---	---	---	1.4
14	.42	.32	.30	.48	1.2	.94	2.2	---	---	---	---	.93
15	.23	.34	.28	.44	1.1	.85	2.6	---	---	---	---	.71
16	.21	.34	.29	.43	1.1	.83	2.9	---	---	---	---	.63
17	.20	.29	2.7	1.0	1.0	.76	2.6	---	---	---	---	.56
18	.18	.28	3.2	3.0	.94	.76	2.4	---	---	---	---	.51
19	.17	.27	1.3	1.7	1.1	.73	2.1	---	---	---	---	.46
20	.15	.25	1.3	1.1	.95	.69	1.9	---	---	---	---	.42
21	.16	.28	.92	.94	.90	.69	2.3	---	---	---	---	.58
22	.18	.28	.67	.81	.85	.69	2.1	---	---	---	---	.47
23	.73	.28	.57	.75	.85	.69	1.9	---	---	---	---	.42
24	.35	.28	.76	.77	.82	.69	1.7	---	---	---	---	.38
25	.29	.28	.68	.67	.85	.69	1.5	---	---	---	---	.34
26	.27	.28	.68	.67	1.6	.76	1.5	---	---	---	---	.31
27	.24	.28	.73	.72	2.7	.91	1.5	---	---	---	---	.29
28	.22	.28	.73	.73	2.5	1.2	2.1	---	---	---	---	.26
29	.23	.28	.70	.76	2.5	1.3	3.7	---	---	---	---	.23
30	.30	.28	.85	.82	---	1.4	3.6	---	---	---	---	.23
31	.55	---	.64	.90	---	1.3	---	---	---	---	---	---
TOTAL	6.81	12.20	20.72	28.34	64.21	35.26	55.31	---	---	---	---	13.91
MEAN	.22	.41	.67	.91	2.21	1.14	1.84	---	---	---	---	.46
MAX	.73	1.7	3.2	3.0	12	2.4	3.7	---	---	---	---	1.4
MIN	.10	.25	.23	.43	.82	.69	.90	---	---	---	---	.23
AC-FT	14	24	41	56	127	70	110	---	---	---	---	28

CAL YR 1987 TOTAL 712.59 MEAN 1.95 MAX 14 MIN .06 AC-FT 1410

e Estimated

09466500 GILA RIVER AT CALVA, AZ
(National stream-quality accounting network station)

LOCATION.--Lat 33°11'08", long 110°13'10", in SW¼ sec.8, T.3 S., R.21 E. (unsurveyed), Graham County, Hydrologic Unit 15040005, in San Carlos Indian Reservation, on Southern Pacific Railroad bridge at head of San Carlos Reservoir, 2.0 mi west of Calva.

DRAINAGE AREA.--11,470 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1929 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,517.29 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1954, and Aug. 25, 1958, to Dec. 31, 1962, at datum 2.52 ft lower. Oct. 1, 1954, to Aug. 24, 1958, at datum 5.52 ft lower. Dec. 31, 1962, to Oct. 20, 1972, at site 530 ft downstream at datum 3.65 ft lower. Oct. 20, 1972, to Sept. 30, 1974, supplementary gage at bridge on U.S. Highway 70, 6.2 mi upstream at datum 2,560.19 ft, NGVD.

REMARKS.--Records poor. Diversion above station for irrigation of about 69,000 acres, metallurgical treatment of ores, and municipal uses.

AVERAGE DISCHARGE.--59 years, 331 ft^3/s, 239,800 acre-ft/yr; median of yearly mean discharges, 210 ft^3/s, 152,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150,000 ft^3/s Oct. 3, 1983, gage height, 23.1 ft, from rating curve extended above 87,000 ft^3/s on basis of area-velocity and flow-over-road computations of peak flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1914, probably in excess of 100,000 ft^3/s Jan. 20, 1916, determined on basis of peak discharge at stations near Solomon and at Kelvin.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 18	1615	3,910	8.[illegible]9	Sept. 3	2145	4,360	8.67
Aug. 22	1100	3,280	8.49	Sept. 24	0415	*7,820	*9.27

Minimum daily discharge, 4.9 ft^3/s July 23, 24, 28.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	169	261	353	e360	805	116	704	74	14	24	2830
2	118	180	255	346	e370	948	113	700	74	12	31	3280
3	106	233	264	341	e395	971	113	651	74	11	108	3850
4	98	245	267	339	e410	946	118	604	66	11	330	3020
5	99	248	268	346	e730	888	128	549	53	12	418	2470
6	92	237	267	347	1650	790	131	499	45	11	443	e1370
7	86	225	271	350	2190	712	128	468	44	10	931	e970
8	81	257	271	350	1610	610	124	426	35	10	863	e760
9	78	270	266	e355	1220	580	117	410	35	11	1120	e550
10	76	254	262	e355	956	579	118	386	33	11	1030	e520
11	75	249	261	e340	800	558	121	317	e30	11	1140	e500
12	73	248	256	e330	709	527	121	251	e30	9.9	1340	e1270
13	74	255	251	e330	643	469	120	215	e30	9.4	852	1710
14	77	262	248	e330	593	422	124	194	e25	9.4	743	1120
15	76	266	247	e330	555	402	136	190	e25	12	666	843
16	73	273	245	e330	536	397	163	202	e25	11	763	693
17	76	277	230	e330	513	339	219	205	e20	9.4	2670	655
18	84	272	e610	e390	496	306	381	203	e20	9.7	3460	635
19	85	263	e510	e435	487	248	922	176	e20	9.7	2910	622
20	90	259	e480	e515	482	217	948	150	e20	9.4	2100	595
21	96	256	e435	e470	486	202	1160	135	e20	5.6	1910	548
22	99	259	e390	e400	460	187	1150	139	20	5.4	2780	789
23	102	256	e320	e380	426	171	1120	150	17	4.9	2650	4520
24	105	257	e400	e370	400	160	1090	150	15	4.9	2030	5390
25	110	251	e460	e365	367	150	1050	130	19	5.1	2510	2460
26	114	248	472	e360	332	143	923	109	20	5.1	1470	1900
27	124	253	438	e355	319	135	796	97	16	5.1	e1220	1510
28	129	258	410	e350	327	129	679	e90	15	4.9	e1270	1250
29	132	260	389	e355	422	127	679	e85	15	15	e1030	1060
30	134	259	374	e360	---	120	668	e80	15	28	e1060	1020
31	146	---	360	e365	---	116	---	e75	---	24	1850	---
TOTAL	2986	7499	10448	11272	19244	13354	13776	8740	950	321.9	41722	49310
MEAN	96.3	250	337	364	664	431	459	282	31.7	10.4	1346	1644
MAX	146	277	610	515	2190	971	1160	704	74	28	3460	5390
MIN	73	169	230	330	319	116	113	75	15	4.9	24	500
AC-FT	5920	14870	20720	22360	38170	26490	27320	17340	1880	638	82760	97810

CAL YR	1987	TOTAL	133683	MEAN	366	MAX	1500	MIN	11	AC-FT	265200
WTR YR	1988	TOTAL	179622.9	MEAN	491	MAX	5390	MIN	4.9	AC-FT	356300

e Estimated

09466500 GILA RIVER AT CALVA, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT 1987 22...	1100	98	2800	8.50	--	19.0	59	675	9.9	122	12	51
NOV 18...	1200	271	1850	8.80	--	11.0	95	698	9.6	96	37	510
DEC 21...	1400	401	1200	8.20	--	11.0	750	695	10.5	105	<10	700
JAN 1988 13...	1400	329	--	8.60	--	10.5	110	700	10.6	103	130	K24
FEB 26...	1000	317	2000	8.30	--	15.0	37	695	9.0	99	36	92
MAR 23...	1030	173	3000	8.50	--	15.0	12	695	9.8	108	140	K8
APR 19...	1430	1010	570	--	26.0	22.0	290	705	9.2	114	10	--
MAY 16...	1130	196	2480	8.30	30.0	25.0	17	708	7.8	103	23	K12
JUN 13...	1200	36	3700	8.40	34.0	22.0	1.5	705	8.6	108	19	20
JUL 11...	1200	12	4050	8.30	36.0	34.0	1.1	710	6.7	104	--	70
AUG 25...	1400	2520	408	8.10	38.0	28.0	1400	--	--	61	33	200
SEP 13...	1300	1580	540	--	31.0	25.0	2700	725	12.8	163	55	1000

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT 1987 22...	140	320	160	80	30	430	11	8.1	328	4	269	240
NOV 18...	1100	280	84	80	20	260	7	5.3	270	11	239	170
DEC 21...	11000	190	14	54	14	170	6	5.0	223	0	183	110
JAN 1988 13...	900	280	39	79	19	240	7	5.0	286	1	236	160
FEB 26...	2300	300	46	85	21	280	7	7.5	305	0	250	190
MAR 23...	170	430	130	120	32	460	10	8.4	365	6	309	300
APR 19...	--	74	0	20	5.9	86	4	2.8	--	--	124	51
MAY 16...	110	340	120	95	26	440	11	7.6	335	5	278	280
JUN 13...	280	400	150	100	37	720	16	9.9	322	5	272	430
JUL 11...	190	410	190	98	39	710	16	10	294	0	241	460
AUG 25...	6200	98	0	28	6.8	46	2	3.1	129	0	106	30
SEP 13...	K13000	100	0	29	6.8	70	3	3.8	--	--	--	37

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09466500 GILA RIVER AT CALVA, AZ--Continued

WATER QUALITY DATA

DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 1987												
22...	510	1.9	41	1550	1450	2.11	5	--	<0.010	1.20	1.20	<0.010
NOV												
18...	350	1.7	--	1060	1010	1.44	345	--	--	1.10	--	0.020
DEC												
21...	190	1.1	--	702	652	0.95	1280	--	--	1.00	--	0.020
JAN 1988												
13...	300	1.6	38	992	992	1.35	<1	--	<0.010	1.10	1.10	0.020
FEB												
26...	360	1.6	--	1150	1100	1.56	96	--	--	1.60	--	<0.010
MAR												
23...	500	1.5	--	1700	1600	2.31	27	--	--	1.90	--	<0.010
APR												
19...	66	0.90	31	347	350	0.47	1150	0.330	0.050	<0.100	0.380	0.020
MAY												
16...	510	1.7	--	1550	1500	2.11	52	--	--	1.60	--	0.040
JUN												
13...	840	1.8	--	2310	2290	3.14	17	--	--	0.400	--	0.060
JUL												
11...	860	1.8	39	2490	2350	3.39	5	--	<0.010	<0.100	<0.100	0.060
AUG												
25...	39	0.70	--	267	230	0.36	3400	--	--	0.200	--	0.130
SEP												
13 ..	63	0.90	--	334	298	0.45	9500	--	--	0.400	--	0.030

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P) (00673)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT 1987												
22...	0.020	--	1.1	2.3	10	0.030	0.020	0.020	0.06	0.03	0.0	20
NOV												
18...	--	0.18	0.20	1.3	5.8	0.090	--		--	0.09	--	--
DEC												
21...	--	3.3	3.3	4.3	19	1.20	--	--	--	1.2	--	--
JAN 1988												
13...	<0.010	0.38	0.40	1.5	6.6	0.110	0.070	0.060	0.18	0.11	0.01	10
FEB												
26...	--	--	0.60	2.2	9.7	0.090	--	--	--	0.09	--	--
MAR												
23...	--	--	0.30	2.2	9.7	0.100	--	--	--	0.10	--	--
APR												
19...	0.030	3.3	3.3	--	--	0.160	0.130	0.200	0.61	0.16	0.0	130
MAY												
16...	--	0.66	0.70	2.3	10	0.050	--	--	--	0.05	--	--
JUN												
13...	--	0.44	0.50	0.90	4.0	0.020	--	--	--	0.02	--	--
JUL												
11...	0.060	0.54	0.60	--	--	0.020	<0.010	0 010	0.03	0.02	--	<10
AUG												
25...	--	0 37	0.50	0.70	3.1	0.200	--	--	--	0.20	--	--
SEP												
13...	--	0.27	0.30	0.70	3.1	1.30	--	--	--	1.3	--	--

< Actual value is known to be less than value shown.

09466500 GILA RIVER AT CALVA, AZ--Continued

WATER QUALITY DATA

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1987											
22...	6	6	100	<10	510	<1	<1	<1	2	1	24
NOV											
18...	5	5	51	--	310	<1	<1	12	2	--	48
DEC											
21...	6	4	39	--	170	<1	<1	62	<1	--	280
JAN 1988											
13...	5	4	100	<10	270	--	<1	6	2	1	43
FEB											
26...	4	4	64	--	330	<1	<1	5	2	--	30
MAR											
23...	4	3	200	--	570	<1	<1	2	<1	--	16
APR											
19...	4	4	15	<0.5	90	1	<1	26	<1	<3	200
MAY											
16...	3	5	100	--	510	2	1	3	6	--	51
JUN											
13...	4	3	<100	--	840	2	<1	2	2	--	18
JUL											
11...	6	7	200	<10	860	1	1	1	<1	2	8
AUG											
25...	3	3	26	--	60	<1	<1	78	2	--	360
SEP											
13...	6	4	25	--	80	<1	<1	200	<1	--	740

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)
OCT 1987											
22...	5	3300	10	<5	<5	300	120	10	<0.10	0.2	10
NOV											
18...	4	8500	7	7	<5	--	290	4	0.10	--	--
DEC											
21...	4	56000	9	31	<5	--	1300	2	0.10	--	--
JAN 1988											
13...	5	6800	20	<5	<5	190	230	<10	<0.10	<0.1	7
FEB											
26...	5	4200	9	<5	<5	--	130	3	<0.10	--	--
MAR											
23...	5	1600	10	<5	<5	--	60	<10	<0.10	--	--
APR											
19...	11	30000	65	19	<5	60	960	2	0.10	<0.1	<10
MAY											
16...	11	130	10	8	<5	--	60	<10	0.20	--	--
JUN											
13...	8	350	10	<5	<5	--	40	<10	0.10	--	--
JUL											
11...	6	190	20	<5	<5	430	40	20	0.10	<0.1	14
AUG											
25...	13	71000	360	60	<5	--	3400	23	0.20	--	--
SEP											
13...	8	110000	86	110	<5	--	6600	3	1.3	--	--

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1987											
22...	3	<1	1	<1.0	1000	16	20	<10	--	211	56
NOV											
18...	--	<1	<1	<1.0	--	--	40	<3	--	553	405
DEC											
21...	--	<1	<1	<1.0	--	--	220	<3	--	2480	2690
JAN 1988											
13...	2	<1	<1	<1.0	760	10	40	<10	--	385	342
FEB											
26...	--	1	1	1.0	--	--	40	<3	--	307	263
MAR											
23...	--	1	1	<1.0	--	--	20	<10	--	138	64
APR											
19...	1	<1	<1	1.0	200	13	160	11	--	--	--
MAY											
16...	--	1	2	1.0	--	--	110	20	--	197	104
JUN											
13...	--	2	2	<1.0	--	--	10	20	--	15	1.5
JUL											
11...	5	<1	<1	1.0	1400	23	30	80	3	76	2.4
AUG											
25...	--	<1	<1	<1.0	--	--	390	17	84	4240	28800
SEP											
13...	--	<1	<1	<1.0	--	--	800	11	--	--	--

< Actual value is known to be less than value shown.

09468500 SAN CARLOS RIVER NEAR PERIDOT, AZ

LOCATION.--Lat 33°17'47", long 110°27'03", in SE¼ sec.36, T.1 S., R.18 E. (unsurveyed), Gila County, Hydrologic Unit 15040007, in San Carlos Indian Reservation, on U.S. Highway 70 bridge, 0.9 mi south of Peridot.

DRAINAGE AREA.--1,026 mi^2.

PERIOD OF RECORD.--August 1910 to January 1911 (gage heights only), April 1914 to July 1915, August to September 1915 (monthly discharge only), October 1929 to current year. Prior to October 1929 published as "at San Carlos."

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,542.29 ft above National Geodetic Vertical Datum of 1929 (Arizona Highway Department bench mark). See WSP 1713 or 1733 for history of changes prior to Feb. 1, 1942. Feb. 1, 1942, to Aug. 13, 1970, at sites 1.9 mi upstream at different datums. Aug 14, 1970, to Sept. 30, 1980, at site 1.8 mi upstream at datum 2,578.90 ft, National Geodetic Vertical Datum of 1929. Supplementary water-stage recorder Dec. 21, 1967, to July 2, 1968, at site 2.2 mi downstream at datum in use prior to Feb. 1, 1942; Jan. 31, 1979, to Sept. 30, 1980, at present site and datum.

REMARKS.--No estimated daily discharges. Records fair. Diversions above station for irrigation of about 600 acres. Small inflow from sewage treatment system about 3.6 mi upstream. Flow regulated to some extent since June 15, 1979, by Talkalai Reservoir; capacity, about 6,000 acre-ft.

AVERAGE DISCHARGE.--59 years (water years 1930-88), 55.8 ft^3/s, 40,430 acre-ft/yr; median of yearly mean discharges, 34 ft^3/s, 24,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,600 ft^3/s Mar. 14, 1941, gage height, 11.4 ft, site and datum then in use, from rating curve extended above 23,000 ft^3/s on basis of rate of change in storage in San Carlos Reservoir; maximum gage height 14.8 ft, Dec. 22, 1965, site and datum then in use; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 21	0500	2,500	6.17	Aug. 27	2000	*3,400	*6.65
Aug. 26	2400	2,750	6.31				

Minimum daily discharge, 3.6 ft^3/s June 14, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	25	17	35	70	26	16	104	6.1	5.1	56	263
2	7.1	31	19	31	48	25	17	66	6.2	4.9	31	149
3	6.8	25	19	27	71	27	17	48	6.4	4.6	23	192
4	6.8	21	17	26	239	27	17	38	7.1	4.0	44	127
5	6.8	17	18	25	569	27	17	32	7.9	3.9	309	68
6	6.8	17	20	27	567	27	16	30	5.2	4.2	106	45
7	8.9	17	20	54	293	27	16	28	4.6	4.4	114	33
8	9.3	17	20	56	177	25	16	25	4.3	6.8	60	29
9	11	15	18	38	115	23	16	24	4.2	23	36	26
10	8.2	15	17	28	78	23	15	22	4.1	24	24	24
11	9.9	13	18	24	59	23	15	21	4.4	14	19	21
12	9.2	13	17	20	47	23	15	21	4.8	8.2	16	21
13	9.2	14	18	18	42	23	15	18	4.0	6.4	13	20
14	14	15	20	17	39	22	16	17	3.6	5.7	13	18
15	14	15	21	15	37	21	19	17	3.6	4.8	92	19
16	12	15	22	15	35	21	20	16	4.2	4.2	735	18
17	11	15	22	16	33	21	21	16	4.5	4.2	120	18
18	11	15	35	49	31	20	27	14	4.8	16	67	18
19	11	16	37	154	31	19	63	14	6.6	12	20	17
20	9.3	14	34	114	31	19	44	13	7.3	12	87	31
21	9.3	15	37	70	29	19	34	11	6.6	14	1000	25
22	9.3	15	36	52	29	19	36	11	6.0	11	128	18
23	14	16	31	43	29	19	138	10	5.7	8.4	85	16
24	17	15	28	50	29	19	164	10	5.3	6.9	116	15
25	17	15	30	80	27	19	106	9.3	5.2	13	55	15
26	17	15	28	74	27	19	75	9.0	5.7	12	91	15
27	14	17	26	69	27	19	58	7.5	4.7	9.2	1160	15
28	12	17	27	101	27	18	51	6.9	5.3	11	445	14
29	12	17	27	110	27	17	187	6.2	5.3	17	260	14
30	15	17	24	92	---	16	226	6.0	5.0	15	83	13
31	17	---	33	87	---	16	---	6.0	---	63	44	---
TOTAL	346.9	504	756	1617	2863	669	1495	676.9	158.7	352.9	5452	1317
MEAN	11.2	16.8	24.4	52.2	98.7	21.6	49.8	21.8	5.29	11.4	176	43.9
MAX	17	31	37	154	569	27	226	104	7.9	63	1160	263
MIN	6.8	13	17	15	27	16	15	6.0	3.6	3.9	13	13
AC-FT	688	1000	1500	3210	5680	1330	2970	1340	315	700	10810	2610

CAL YR 1987 TOTAL 16562.0 MEAN 45.4 MAX 1130 MIN 3.2 AC-FT 32850
WTR YR 1988 TOTAL 16208.4 MEAN 44.3 MAX 1160 MIN 3.6 AC-FT 32150

09469000 SAN CARLOS RESERVOIR AT COOLIDGE DAM, AZ

LOCATION.--Lat 33°10'32", long 110°31'38", in NW¼ sec.17, T.3 S., R.18 E. (unsurveyed), Gila County, Hydrologic Unit 15040005, in San Carlos Indian Reservation, at right intake tower of Coolidge Dam on Gila River.

DRAINAGE AREA.--12,886 mi^2.

REVISED RECORDS.--WSP 1049: 1929, 1934, 1937-38. WSP 1283: Drainage area.

PERIOD OF RECORD.--November 1928 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929. Prior to Jan. 15, 1937, series of stakes with tops at known elevations for reference points on right bank about 1,000 ft upstream from dam. Jan. 15, 1937, to Dec. 31, 1947, water-stage recorder at present site at datum 0.72 ft lower.

REMARKS.--Reservoir is formed by concrete multiple-dome dam. Dam completed Oct. 25, 1928; storage began Nov. 15, 1928. Usable capacity (from capacity table computed by San Carlos Irrigation District, based on an estimate of sediment deposited since 1966; used since Jan. 1, 1982) 935,000 acre-ft between elevations 2,382.63 ft, sill of lowest outlet gate, and 2,512.3 ft, crest of spillway. No dead storage. Figures given herein represent usable contents. Reservoir is used to store water for irrigation of San Carlos project and for power development, dependent on irrigation demands. Spill over Coolidge Dam because of capacity storage has occurred April 22 to May 5, 1979, Feb. 24 to Mar. 13, 1980, Oct. 4-23, 28-31, Dec. 3-13, 1983, Jan. 2 to June 5, 1985.

COOPERATION.--Wire-weight gage readings furnished by U.S. Bureau of Indian Affairs.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 1,090,000 acre-ft Feb. 26 to Mar. 6, 1980; maximum elevation observed, 2,520.3 ft Feb. 28, 1980; no usable contents at times.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 567,000 acre-ft Feb. 19-28, elevation, 2,488.1 ft; minimum, 305,000 acre-ft Aug. 16, elevation, 2,464.4 ft.

Capacity table (elevation, in feet, and usable contents, in acre-ft)

2,460	266,000	2,480	468,000
2,465	310,000	2,485	528,000
2,470	359,000	2,490	592,000
2,475	412,000		

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	496000	496000	506000	517000	539000	566000	527000	533000	493000	412000	321000	345000
2	496000	497000	506000	518000	540000	566000	526000	534000	491000	409000	320000	348000
3	496000	498000	506000	518000	541000	566000	524000	535000	489000	406000	317000	352000
4	496000	499000	506000	518000	543000	567000	523000	536000	487000	403000	315000	358000
5	496000	499000	507000	519000	544000	567000	522000	536000	484000	400000	314000	362000
6	496000	499000	508000	520000	548000	567000	521000	536000	481000	397000	312000	364000
7	495000	499000	508000	520000	552000	565000	520000	536000	478000	394000	312000	365000
8	495000	499000	508000	520000	555000	564000	520000	536000	476000	392000	312000	365000
9	495000	499000	509000	521000	558000	563000	519000	536000	474000	389000	311000	365000
10	495000	500000	509000	521000	560000	562000	518000	536000	471000	386000	310000	365000
11	495000	500000	508000	522000	561000	561000	517000	536000	468000	383000	310000	366000
12	495000	500000	508000	523000	562000	559000	516000	535000	466000	380000	310000	366000
13	495000	501000	508000	523000	563000	558000	515000	534000	463000	377000	309000	366000
14	495000	502000	507000	523000	564000	557000	515000	532000	461000	375000	307000	368000
15	495000	502000	506000	524000	565000	555000	514000	531000	458000	371000	306000	368000
16	495000	502000	506000	524000	566000	553000	514000	528000	455000	368000	305000	369000
17	495000	502000	507000	526000	566000	552000	514000	525000	452000	365000	306000	369000
18	495000	502000	508000	527000	566000	550000	514000	523000	450000	362000	310000	369000
19	495000	503000	508000	528000	567000	548000	514000	521000	448000	359000	313000	369000
20	495000	503000	510000	529000	567000	547000	515000	518000	446000	356000	316000	370000
21	495000	503000	510000	530000	567000	546000	518000	516000	443000	353000	319000	370000
22	495000	504000	512000	531000	567000	544000	520000	514000	440000	350000	324000	371000
23	495000	504000	512000	531000	567000	542000	522000	512000	437000	347000	328000	377000
24	495000	504000	512000	531000	567000	540000	524000	510000	434000	345000	330000	386000
25	495000	504000	513000	533000	567000	539000	526000	509000	431000	342000	332000	391000
26	495000	504000	514000	533000	567000	537000	527000	506000	428000	340000	334000	394000
27	495000	504000	514000	534000	567000	535000	529000	504000	424000	337000	338000	396000
28	495000	505000	515000	535000	567000	533000	531000	502000	421000	334000	339000	398000
29	495000	505000	516000	537000	566000	531000	533000	499000	418000	330000	339000	399000
30	495000	505000	516000	537000	---	530000	534000	496000	415000	328000	339000	400000
31	495000	---	517000	537000	---	528000	---	495000	---	325000	341000	---
MAX	496000	505000	517000	537000	567000	567000	534000	536000	493000	412000	341000	400000
MIN	495000	496000	506000	517000	539000	528000	514000	495000	415000	325000	305000	345000
(*)	2482.2	2483.1	2484.1	2485.7	2488.0	2485.0	2485.4	2482.2	2475.3	2466.5	2468.2	2473.9
(**)	-1000	+10000	+12000	+20000	+29000	-38000	+6000	-39000	-80000	-90000	+16000	+59000

CAL YR 1987 MAX 792000 MIN 495000 ** -199000
WTR YR 1988 MAX 567000 MIN 305000 ** -96000

* Elevation in feet, at end of month.
** Change in contents, in acre-feet.

09469500 GILA RIVER BELOW COOLIDGE DAM, AZ

LOCATION.--Lat 33°10'10", long 110°31'50", in SW¼ sec.17, T.3 S., R.18 E. (unsurveyed), Pinal County, Hydrologic Unit 15050100, on left bank 2,200 ft downstream from Coolidge Dam.

DRAINAGE AREA.--12,886 mi^2.

PERIOD OF RECORD.--July to October 1899, April 1900 to March 1902, July to September 1902, December 1902 to December 1904, January to May 1905 (gage heights only), June to November 1905; August 1910 to February 1911 (gage heights only); April 1914 to current year. Published as "at San Carlos" 1899-1911, as "near San Carlos" 1914-26, and as "at Coolidge Dam" 1927-38.

REVISED RECORDS.--WSP 629: 1915-16. WSP 1049: 1899-1904. WSP 1149: 1916(M), 1921, 1922(M), 1923, 1924(M). WSP 1283: Drainage area.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 2,309.33 ft above National Geodetic Vertical Datum of 1929. Prior to Feb. 5, 1911, nonrecording gage at various sites and datums upstream from mouth of San Carlos River. Apr. 29, 1914, to Mar. 8 1937, water-stage recorder at various sites within 1 mi upstream from present site at different datums. Mar. 27, 1979 to Oct. 10, 1980, and since Oct. 4, 1983, supplementary water-stage recorder at site on left bank 1,000 ft upstream at datum 2,293.5 ft above NGVD, used above discharges at approximately 1,570 ft^3/s, maximum capacity of parshall flume.

REMARKS.--No estimated daily discharges. Records excellent except those below 20 ft^3/s, which are fair. Flow regulated by San Carlos Reservoir since Nov. 15, 1928. (See sta 09468000.) Record includes flow of Warm Springs, which enters between dam and gage. Large diversions above San Carlos Reservoir for irrigation, metallurgical treatment of ore, and municipal supply; about 64,600 acres of land was irrigated, a considerable portion by pumping from ground water.

AVERAGE DISCHARGE (adjusted for storage in San Carlos Reservoir).--76 years (water years 1901, 1904, 1915-88) 384 ft^3/s, 278,200 acre-ft/yr; median of yearly mean discharges, 240 ft^3/s, 174,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1914-28: Maximum discharge, 130,000 ft^3/s Jan. 20, 1916, estimated on basis of peak discharge near Solomon and at Kelvin; no flow at times.

1928-88: Maximum discharge, 5,020 ft^3/s Oct. 6, 1983, gage height, 11.7 ft, at supplementary gage; no flow at times prior to 1938; minimum daily since 1938, 0.40 ft^3/s in several years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 1,400 ft^3/s June 29, 30, July 12, 19-21; minimum daily, 1.0 ft^3/s Nov. 5, 12-17, 19, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	1.6	50	50	49	569	802	231	1120	1330	1390	952
2	79	1.1	50	51	22	668	765	248	1120	1330	1330	952
3	79	1.2	49	51	3.3	725	757	277	1120	1330	1250	997
4	79	1.2	49	65	3.4	741	836	343	[illegible]	[illegible]	1280	1030
5	95	1.0	79	73	2.1	826	824	[illegible]	1120	1390	1260	971
6	121	1.1	100	73	1.2	872	763	[illegible]	[illegible]	1340	1250	926
7	111	1.1	115	73	1.2	916	555	445	[illegible]	[illegible]	1220	920
8	108	1.1	187	73	1.2	949	552	443	[illegible]	1360	1200	921
9	106	1.1	229	73	43	995	533	472	1200	[illegible]	1230	866
10	106	1.1	229	73	75	1050	524	554	1200	[illegible]	1200	794
11	106	1.1	241	73	76	1070	546	654	[illegible]	[illegible]	1200	774
12	106	1.0	250	73	153	1070	[illegible]	695	[illegible]	[illegible]	1170	748
13	106	1.0	250	73	202	1070	474	[illegible]	[illegible]	[illegible]	1150	704
14	106	1.0	250	73	202	1070	445	794	1150	[illegible]	1250	673
15	71	1.0	250	73	217	1070	465	815	1230	[illegible]	1230	659
16	2.2	1.0	250	73	264	1070	455	[illegible]	1280	[illegible]	1230	605
17	1.5	1.0	176	73	290	1070	411	976	1360	1360	1230	554
18	1.6	1.3	68	31	290	1060	351	[illegible]	1300	1390	1230	456
19	1.7	1.0	50	1.1	299	1050	313	1150	1290	1400	1230	298
20	1.9	1.1	51	2.0	316	1050	237	1150	1290	1400	1230	214
21	3.0	1.0	50	1.1	325	1020	216	1180	1290	1400	1220	162
22	5.2	1.1	50	16	358	1000	125	1200	1320	1390	1050	132
23	1.8	29	50	28	377	985	105	1170	1340	1390	953	132
24	1.7	50	50	29	423	975	107	1150	1340	1070	969	133
25	1.7	50	50	29	481	974	111	1140	1370	1390	979	119
26	3.1	50	50	30	518	974	140	1150	1370	1390	966	111
27	3.9	50	50	13	546	975	155	1130	1360	1390	957	111
28	1.5	50	66	2.3	546	974	186	1120	1330	1390	958	111
29	1.3	50	76	1.4	550	960	208	1120	1400	1360	958	111
30	1.7	50	41	1.1	---	915	223	1120	1400	1380	953	111
31	1.6	---	30	29	---	840	---	1120	---	1380	950	---
TOTAL	1492.4	403.2	3536	1382.0	6634.4	29556	12208	25289	37560	42730	35633	16245
MEAN	48.1	13.4	114	44.6	229	953	407	816	1252	1378	1149	541
MAX	121	50	250	73	550	1070	802	1200	1400	1400	1390	1030
MIN	1.3	1.0	30	1.1	1.2	569	105	231	1120	1070	950	111
AC-FT	2960	800	7010	2740	13160	58620	24220	50160	74500	84750	70680	32220

CAL YR 1987 TOTAL 221594.6 MEAN 607 MAX 1370 MIN 1.0 AC-FT 439500
WTR YR 1988 TOTAL 212670.0 MEAN 581 MAX 1400 MIN 1.0 AC-FT 421800

09470000 GILA RIVER AT WINKELMAN, AZ

LOCATION.--Lat 33°00'21", long 110°45'21", in SW¼SW¼ sec.7, T.5 S., R.15 E., Gila County, Hydrologic Unit 15050100, on right bank 1.2 mi north of Winkelman, 2.4 mi upstream from San Pedro River, and 29 mi downstream from Coolidge Dam.

DRAINAGE AREA.--13,268 mi^2, of which 382 mi^2 is below Coolidge Dam.

PERIOD OF RECORD.--September 1917 to June 1918, September 1941 to September 1980, July 1984 to current year.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,935 ft above National Geodetic Vertical Datum of 1929, from topographic map. Sept. 10, 1917, to June 27, 1918, nonrecording gage at bridge 1.4 mi downstream at different datum. September 1941 to Jan. 5, 1964, at site about 400 ft upstream at datum 0.81 ft lower. Supplementary nonrecording gage 1.3 mi downstream since Aug. 9, 1963, at datum 13.68 ft lower; supplementary water-stage recorder Jan. 6, 1964, to Nov. 24, 1975, at bridge 1.4 mi downstream at datum 14.76 ft lower. July 1984 to Jan. 16, 1987, at site 0.25 mi downstream at different datums.

REMARKS.--Records good. Large diversions above station for irrigation, metallurgical treatment of ore, and municipal supply, but none between Coolidge Dam and this station. About 69,000 acres irrigated in the basin above Coolidge Dam, a considerable portion by pumping from ground water. Flow regulated by San Carlos Reservoir (See sta 09469000).

AVERAGE DISCHARGE (adjusted for storage in San Carlos Reservoir).--43 years (water years 1942-80, 1985-88), 326 ft^3/s, 236,200 acre-ft/yr; median of yearly mean discharges, 190 ft^3/s, 138,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55,000 ft^3/s of which 500 ft^3/s was released by Coolidge Dam, Aug. 9, 1944, gage height, 18.40 ft, from rating curve extended above 2,900 ft^3/s on basis of slope-area measurement of peak flow; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge during period Oct. 1980 to June 1984, 17,000 ft^3/s, Oct. 2, 1983, gage height 16.0 ft, from flood mark, from rating curve extended above 8,000 ft^3/s, (no significant release from Coolidge Dam).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,950 ft^3/s, Aug. 20, gage height, 6.71 ft, unadjusted for release from Coolidge Dam; minimum daily, 11 ft^3/s Oct. 31 to Nov. 5-12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	32	56	36	30	588	851	e210	1140	1330	1380	1050
2	69	19	55	50	57	635	844	e230	1140	1330	1390	1040
3	69	15	54	52	46	772	797	e250	1140	1340	1310	1040
4	69	12	54	52	29	790	778	e280	1140	1330	1330	1100
5	70	11	53	63	26	837	674	313	1140	1330	1310	1070
6	96	11	86	70	26	929	656	353	1160	1330	1280	1000
7	115	11	100	71	24	935	559	399	1160	1340	1270	1000
8	105	11	124	71	23	998	538	397	1200	1350	1240	992
9	105	11	219	71	22	1010	524	407	1200	1350	1240	978
10	106	11	228	71	40	1070	521	455	1210	1360	1240	893
11	105	11	232	71	79	1130	526	585	1220	1360	1250	865
12	104	11	252	72	82	1140	531	603	1210	1360	1250	842
13	106	12	254	71	197	1140	461	677	1220	1360	1210	786
14	109	12	254	71	209	1140	468	799	1220	1370	1230	731
15	106	12	256	71	213	1150	460	837	1230	e1360	1290	707
16	76	12	256	73	243	1140	439	891	1260	e1360	1270	672
17	32	13	257	72	305	1150	418	962	1280	e1360	1280	586
18	23	13	144	97	308	1150	342	1040	1280	e1360	1270	536
19	19	12	74	130	312	1140	293	1140	1280	e1360	1250	400
20	16	12	61	52	316	1130	269	1150	1270	e1360	1290	247
21	15	13	58	36	336	1110	253	1160	1270	e1360	1390	222
22	14	13	56	31	341	1110	172	1200	1250	e1360	1230	152
23	16	14	55	29	386	1110	e140	1190	1280	e1360	1060	138
24	16	20	55	38	399	1090	e120	1170	1280	1200	1070	141
25	15	49	56	39	474	1090	e110	1170	1280	1250	1080	133
26	15	52	54	40	515	1090	e130	1170	1300	1410	1070	111
27	15	53	54	40	557	1090	e150	1170	1290	1360	1120	108
28	15	55	54	37	556	1010	e160	1150	1300	1350	1070	108
29	15	55	69	27	565	1000	e180	1150	1330	1350	1060	107
30	14	56	74	25	---	975	e200	1140	1320	1360	1080	105
31	11	---	51	24	---	922	---	1140	---	1410	1030	---
TOTAL	1728	644	3705	1753	6716	31591	12564	24788	37000	41770	37840	17860
MEAN	55.7	21.5	120	56.5	232	1019	419	800	1233	1347	1221	595
MAX	115	56	257	130	565	1150	851	1200	1330	1410	1390	1100
MIN	11	11	51	24	22	588	110	210	1140	1200	1030	105
AC-FT	3430	1280	7350	3480	13320	62660	24920	49170	73390	82850	75060	35430

CAL YR 1987 TOTAL 224986 MEAN 616 MAX 1330 MIN 11 AC-FT 446300
WTR YR 1988 TOTAL 217959 MEAN 596 MAX 1410 MIN 11 AC-FT 432300

e Estimated

09471000 SAN PEDRO RIVER AT CHARLESTON, AZ
(National stream-quality accounting network station)

LOCATION.--Lat 31°37'33", long 110°10'26", in NE¼NE¼ sec.11, T.21 S., R.21 E., Cochise County, Hydrologic Unit 15050202, in Spanish land grant of San Juan de las Boquillas y Nogales, at downstream side of pier near center of highway bridge, 0.3 mi south of Charleston, 1.5 mi upstream from Charleston damsite, and 9 mi upstream from Babocomari River.

DRAINAGE AREA.--1,219 mi^2, of which 696 mi^2 is in Mexico.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January and February 1904 (gage heights only); March 1904 to August 1906; November 1910 to December 1911 (gage heights only); September 1912 to current year. Monthly discharge only October 1926 to May 1928 and December 1933 to April 1935, published in WSP 1313. Published as "near Lewis Springs" 1910-11, and as "near Fairbank" 1911-26.

REVISED RECORDS.--WSP 1119: 1939(M). WSP 1213: 1914, 1916(M), 1918(M), 1919 , 1920(M), 1922-23(M). WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,954.01 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 1, 1942, nonrecording gage or water-stage recorder at various sites within 6.5 mi downstream at different datums.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above station, mostly by pumping from ground water, for irrigation of 3,200 acres in 1978, excluding an unknown amount in Mexico. Record shows flow available at Charleston damsite.

AVERAGE DISCHARGE.--77 years (water years 1905, 1913-88), 59.0 ft^3/s, 42,750 acre-ft/yr; median of yearly mean discharges, 47 ft^3/s, 34,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 98,000 ft^3/s Sept. 28, 1926, gage height, 21.9 ft, site and datum then in use, by slope-area measurement of peak flow; minimum since 1928, 0.30 ft^3/s July 14-16, 1982, gage height, 1.83 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 12	0245	*3,640	*6.87

Minimum daily discharge, 2.2 ft^3/s June 29, July 2-5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e35	10	11	18	e16	15	14	9.2	4.6	2.3	54	e70
2	e34	15	12	17	e16	15	15	9.2	4.5	2.2	84	61
3	e32	e13	12	17	e16	15	15	9.3	4.4	2.2	208	98
4	e30	e13	11	17	e16	15	14	8.6	4.3	2.2	509	61
5	e28	e13	12	17	e16	15	14	7.8	4.1	2.2	148	56
6	e27	e12	11	17	e17	15	14	e7.0	4.0	9.4	e90	53
7	e25	e12	11	17	e17	15	15	e6.5	3.9	4.5	e205	52
8	e22	e12	11	16	e17	15	15	e6.5	3.9	89	316	51
9	e22	e12	10	16	e17	15	14	e6.5	3.8	133	412	50
10	e20	e12	10	16	e17	15	13	e6.5	3.7	34	e125	50
11	e19	e12	11	16	e17	16	12	e6.0	3.6	e6.0	e80	194
12	e18	e12	10	16	e17	17	12	e6.0	3.5	e5.5	e60	1540
13	e16	e12	11	15	e17	17	12	e6.0	3.4	e5.0	e55	320
14	e27	e12	11	15	e17	17	14	e5.5	3.4	e5.0	e50	e195
15	e29	e12	11	15	e17	16	13	e5.5	3.4	e4.5	e50	e150
16	e25	e12	11	16	e16	17	13	e5.0	3.4	e4.0	e45	e120
17	e24	e12	13	16	e16	16	13	e5.0	3.3	e3.5	e45	e100
18	e22	e12	91	17	e16	16	12	e5.0	4.2	e6.0	e45	e85
19	e20	e12	85	18	e16	16	12	e5.0	5.1	60	e80	e75
20	e18	e12	32	17	e16	16	12	e5.0	3.8	123	352	e65
21	e15	e12	25	17	e16	16	11	e5.0	3.6	91	102	e55
22	e13	e12	22	17	e16	16	11	e5.0	3.4	e35	125	e45
23	e12	e12	21	e17	15	16	11	e5.0	3.3	e14	156	e35
24	e11	12	21	e17	15	16	11	e5.0	3.0	e12	355	e35
25	e9.5	12	20	e17	15	16	11	e4.5	2.7	e14	556	e30
26	e8.5	11	20	e16	15	15	11	5.1	2.6	94	237	e30
27	6.5	11	19	e16	15	15	10	5.4	2.4	104	521	e26
28	6.5	11	19	16	15	15	10	5.2	2.4	30	999	16
29	6.5	11	19	16	15	14	10	5.2	2.2	41	e320	14
30	6.5	11	19	16	---	14	9.8	5.1	2.4	220	e120	13
31	6.5	---	18	16	---	14	---	5.0	---	93	e90	---
TOTAL	594.5	359	620	510	467	481	373.8	186.6	106.3	1251.5	6594	3745
MEAN	19.2	12.0	20.0	16.5	16.1	15.5	12.5	6.02	3.54	40.4	213	125
MAX	35	15	91	18	17	17	15	9.3	5.1	220	999	1540
MIN	6.5	10	10	15	15	14	9.8	4.5	2.2	2.2	45	13
AC-FT	1180	712	1230	1010	926	954	741	370	211	2480	13080	7430

CAL YR 1987 TOTAL 7777.1 MEAN 21.3 MAX 510 MIN 1.4 AC-FT 15430
WTR YR 1988 TOTAL 15288.7 MEAN 41.8 MAX 1540 MIN 2.2 AC-FT 30330

e Estimated

09471000 SAN PEDRO RIVER AT CHARLESTON, AZ--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--December 1986 to current year.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV 1987 23...	1500	12	495	--	18.0	14.5	3.6	655	9.6	110	57	K6
JAN 1988 27...	1400	17	510	8.40	--	8.5	130	660	10.6	105	<10	K28
MAR 11...	1400	16	480	8.50	--	18.0	14	655	10.0	123	38	K80
MAY 26...	1300	5.9	430	8.30	--	27.0	22	659	7.8	114	25	100
JUN 27...	1130	2.1	390	8.20	34.0	24.0	--	695	8.3	109	--	40
SEP 01...	1530	71	418	8.40	--	28.0	53	655	6.2	93	<10	140
27...	1400	19	527	8.40	--	27.0	2.5	655	7.0	103	<10	K8

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
NOV 1987 23...	46	190	0	55	13	38	1	2.7	--	--	--	46
JAN 1988 27...	22	190	0	55	12	37	1	2.4	252	1	208	60
MAR 11...	48	180	0	49	13	39	1	6.3	214	8	189	57
MAY 26...	67	140	0	35	12	39	1	2.3	163	38	197	36
JUN 27...	210	--	--	--	--	--	--	--	174	10	159	--
SEP 01...	490	170	0	53	8.2	24	0.8	4.1	218	0	180	43
27...	50	210	10	61	13	38	1	3.2	254	0	208	67

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
NOV 1987 23...	11	0.50	23	302	314	0.41	7	--	<0.010	<0.100	<0.100	0.010
JAN 1988 27...	9.0	0.40	19	311	314	0.42	256	--	<0.010	0.300	0.240	<0.010
MAR 11...	9.8	0.50	21	1050	305	1.43	14	0.170	0.010	0.300	0.180	0.010
MAY 26...	8.4	0.70	24	241	261	0.33	32	--	<0.010	<0.100	<0.100	0.030
JUN 27...	--	--	--	--	--	--	--	--	--	--	--	--
SEP 01...	6.7	0.30	20	263	263	0.36	61	--	<0.010	0.100	0.160	<0.010
27...	8.1	0.50	8.7	319	319	0.43	3	--	<0.010	<0.100	<0.100	<0.010

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09471000 SAN PEDRO RIVER AT CHARLESTON, AZ--Continued

WATER QUALITY DATA

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P) (00673)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
NOV 1987												
23...	0.010	--	<0.20	--	--	0.020	<0.010	0.010	0.03	0.02	--	20
JAN 1988												
27...	<0.010	--	0.40	0.70	3.1	0.050	0.020	<0.010	--	0.05	0.02	--
MAR												
11...	0.030	--	<0.20	--	--	0.020	0.010	0.020	0.06	0.02	0.0	<10
MAY												
26...	0.040	0.37	0.40	--	--	0.020	0.020	<0.010	--	0.02	0.02	<10
JUN												
27...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
01...	0.020	--	0.30	0.40	1.8	0.130	0.060	0.050	0.15	0.13	0.01	--
27...	<0.010	--	0.20	--	--	0.030	0.020	0.010	0.03	0.03	0.01	10

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)
NOV 1987												
23...	3	2	120	<0.5	70	<1	<1	3	2	<3	5	7
JAN 1988												
27...	4	2	100	--	50	2	<1	8	1	--	38	11
MAR												
11...	3	2	93	<0.5	60	<1	<1	1	1	<3	8	3
MAY												
26...	5	4	110	<0.5	70	<1	<1	4	1	<3	11	4
JUN												
27...	--	--	--	--	--	--	--	--	--	--	--	--
SEP												
01...	6	6	110	--	40	<1	<1	3	<1	--	27	6
27...	3	3	99	<0.5	60	<1	1	2	<1	<3	7	4

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)
NOV 1987											
23...	240	16	<5	<5	32	50	28	0.10	<0.1	<10	3
JAN 1988											
27...	7200	12	12	<5	--	330	54	<0.10	--	--	--
MAR											
11...	490	9	<5	<5	31	40	11	<0.10	<0.1	<10	<1
MAY											
26...	800	8	<5	<5	38	80	15	<0.10	<0.1	<10	2
JUN											
27...	--	--	--	--	--	--	--	--	--	--	--
SEP											
01...	2700	7	<5	<5	--	150	10	<0.10	--	--	--
27...	200	18	<5	<5	4	30	16	0.10	<0.1	<10	<1

DATE	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
NOV 1987											
23...	<1	<1	3.0	480	500	<6	--	7	94	185	6.0
JAN 1988											
27...	<1	<1	<1.0	530	--	--	40	<3	99	284	13
MAR											
11...	<1	<1	<1.0	460	500	<6	<10	<3	77	33	1.4
MAY											
26...	<1	<1	<1.0	460	440	<6	<10	3	99	30	0.48
JUN											
27...	--	--	--	--	--	--	--	--	89	20	0.11
SEP											
01...	<1	<1	<1.0	380	--	--	30	6	88	122	23
27...	<1	<1	<1.0	440	--	<6	<10	360	89	8	0.41

< Actual value is known to be less than value shown.

09472000 SAN PEDRO RIVER NEAR REDINGTON, AZ

LOCATION.--Lat 32°22'50", long 110°26'45", in NE¼NW¼ sec.18, T.12 S., R.19 E., Cochise County, Hydrologic Unit 15050203, on left bank, 0.3 mi upstream from Cochise-Pima County line, 4.3 mi southeast of Redington, and 30 mi north of Benson.

DRAINAGE AREA.--2,939 mi^2, of which 696 mi^2 is in Mexico.

PERIOD OF RECORD.--June 1943 to June 1947, July 1950 to current year (monthly discharge only, July 1954 to March 1955). Also extremes for water years 1948-50, published in WSP 1179.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder, and, since Aug. 26, 1981, crest-stage gage. Datum of gage is 2,930.04 ft above National Geodetic Vertical Datum of 1929. June 1943 to June 1947, and Oct. 1, 1962, to June 27, 1963, at present site at datum 7.49 ft higher. July 1950 to Sept. 30, 1962, at site 400 ft upstream at datum 10.47 ft higher. Supplementary water-stage recorder 50 ft upstream at same datum since June 29, 1977.

REMARKS.--Records fair except those below 25 ft^3/s, which are poor. Diversions above station for irrigation of about 10,800 acres in 1978, excluding an unknown amount in Mexico. Diversion above gage into formerly used ditch on right bank was placed in operation in January 1972; diversion was observed Nov. 4, Feb. 15 and Apr. 21.

AVERAGE DISCHARGE.--41 years (water years 1944-46, 1951-88), 46.3 ft^3/s, 33,540 acre-ft/yr; median of yearly mean discharges, 29 ft^3/s, 21,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,600 ft^3/s Aug. 2, 1951, gage height, 20.2 ft, present site and datum, from rating curve extended above 16,000 ft^3/s on basis of slope-area measurement of peak flow, maximum gage height 21.60 ft, Oct. 2, 1983; no flow at times in most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1906, about 90,000 ft^3/s Sept. 28, 1926, gage height, 29.0 ft, present site and datum, from floodmark, computed on basis of peak discharge of same flood for station at Charleston and for Gila River at Kelvin.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 12	2200	*1,020	*11.51

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	3.2	2.6	.00	.00	.00	.00	.00	.00	.00	47	42
2	20	4.4	2.8	.00	.00	.00	.00	.00	.00	.00	46	32
3	20	.12	3.0	.00	.00	.00	.00	.00	.00	.00	45	44
4	20	.14	3.5	.00	.00	.00	.00	.00	.00	.00	46	42
5	11	.00	3.8	.00	.00	.00	.00	.00	.00	.00	89	23
6	.00	.00	3.9	.00	.00	.00	.00	.00	.00	.00	67	e17
7	.00	.00	3.9	.00	.00	.00	.00	.00	.00	.00	63	e15
8	.00	.00	4.1	.00	.00	.00	.00	.00	.00	.00	52	e14
9	.18	.00	4.2	.00	.00	.00	.00	.00	.00	14	69	e13
10	.18	.00	4.4	.00	.00	.00	.00	.00	.00	.45	85	e12
11	.18	.00	4.4	.00	.00	.00	.00	.00	.00	13	51	e11
12	.18	.00	4.6	.00	.00	.00	.00	.00	.00	1.2	41	284
13	.18	.16	4.9	.00	.00	.00	.00	.00	.00	.00	22	175
14	.35	.66	5.0	.00	.00	.00	.00	.00	.00	.00	17	58
15	.35	.63	5.0	.00	.00	.00	.00	.00	.00	.00	e15	42
16	.35	.92	5.0	.00	.00	.00	.00	.00	.00	.00	e22	29
17	.18	1.0	5.8	.00	.00	.00	.00	.00	.00	.00	35	e17
18	.18	.87	6.8	.00	.00	.00	.00	.00	.00	.08	21	e14
19	.18	.62	6.2	.00	.00	.00	.00	.00	.00	51	58	e11
20	.18	.80	16	.00	.00	.00	.00	.00	.00	8.6	76	e9.5
21	.00	.52	15	.00	.00	.00	.00	.00	.00	31	126	e8.4
22	.00	.54	13	.00	.00	.00	.00	.00	.00	90	101	e7.3
23	.18	.79	8.6	.00	.00	.00	.00	.00	.00	31	44	e6.9
24	.18	1.0	7.9	.00	.00	.00	.00	.00	.00	19	78	e6.2
25	.18	1.3	9.2	.00	.00	.00	.00	.00	.00	18	69	e5.8
26	.18	1.2	8.9	.00	.00	.00	.00	.00	.00	18	84	e5.0
27	.00	1.4	9.7	.00	.00	.00	.00	.00	.00	19	47	e4.8
28	.00	1.5	9.0	.00	.00	.00	.00	.00	.00	70	263	e4.2
29	.00	2.0	3.6	.00	.00	.00	.00	.00	.00	39	127	e3.9
30	.12	2.1	1.8	.00	---	.00	.00	.00	.00	36	65	e3.7
31	.00	---	.56	.00	---	.00	---	.00	---	30	59	---
TOTAL	94.51	25.93	166.96	0.00	0.00	0.00	0.00	0.00	0.00	489.33	2030	960.7
MEAN	3.05	.86	5.03	.00	.00	.00	.00	.00	.00	15.8	65.5	32.0
MAX	20	4.4	16	.00	.00	.00	.00	.00	.00	90	263	284
MIN	.00	.00	.56	.00	.00	.00	.00	.00	.00	.00	15	3.7
AC-FT	187	51	371	.0	.0	.0	.0	.0	.0	971	4030	1910

CAL YR	1987	TOTAL	4076.50	MEAN	11.2	MAX	86	MIN	.00	AC-FT	8090
WTR YR	1988	TOTAL	3787.43	MEAN	10.3	MAX	284	MIN	.00	AC-FT	7510

e Estimated

09473000 ARAVAIPA CREEK NEAR MAMMOTH, AZ

LOCATION.--Lat 32°50'37", long 110°37'09", in NW¼NW¼ sec.9, T.7 S., R.17 E., Pinal County, Hydrologic Unit 15050203, on right bank 6 mi upstream from mouth and 9 mi north of Mammoth.

DRAINAGE AREA.--541 mi^2.

PERIOD OF RECORD.--May 1931 to December 1942 (published as "near Feldman"), May 1966 to current year. Monthly discharge only July 1941 to December 1942, published in WSP 1313.

REVISED RECORDS.--WDR AZ-68-1: 1967. WDR AZ-82-1: 1968, 1969, 1973, 1979 (M).

GAGE.--Water-stage recorder and, since March 1980, crest-stage gage. Elevation of gage is 2,345 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1981 to Oct. 1, 1983 gage at site 300 ft upstream at datum 4.19 ft higher. Prior to Oct. 1, 1981, at datum 1.00 ft higher. May 1931 to December 1942 at site 0.3 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of several hundred acres above station.

AVERAGE DISCHARGE.--33 years, 35.4 ft^3/s, 25,650 acre-ft/yr; median of yearly mean discharges, 25 ft^3/s, 18,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge since at least 1919, 70,800 ft^3/s Oct. 1, 1983, from slope-area measurement of peak flow, gage height, 16.76 ft, from profile past gage; minimum, 0.3 ft^3/s Aug. 30, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--A discharge of 20,000 ft^3/s occurred Aug. 2, 1919, at site of former gaging station 6 mi downstream, operated April 1919 to September 1921, gage height, 6.3 ft, from floodmark, site and datum then in use, from rating curve extended above 5,100 ft^3/s on basis of velocity-area study.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*), from rating curve extended above 130 ft^3/s on the basis of slope area measurement at gage height 16.76 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 31	0145	*1,040	*4.28

Minimum daily discharge, 11 ft^3/s, July 14-16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	26	23	27	23	24	e19	17	24	20	51	53
2	23	30	22	23	24	28	e19	e17	22	17	68	47
3	19	23	25	20	24	28	e19	19	19	23	96	37
4	18	20	25	20	23	26	e18	18	19	20	64	e18
5	18	20	25	20	84	24	e18	e17	20	e15	47	e15
6	18	18	26	22	84	24	e17	e15	e15	e15	45	e15
7	18	18	26	21	56	e24	e17	e16	e12	e14	87	e15
8	18	19	26	20	44	e24	e17	e16	e12	e13	48	e15
9	18	19	27	21	34	e24	e17	e16	e12	e12	36	e15
10	17	18	27	21	33	e24	e17	e15	e12	e12	36	e15
11	16	20	27	21	30	e24	e17	e14	16	e17	55	e15
12	16	19	29	21	30	e24	e17	e13	17	e13	45	38
13	17	19	31	21	28	e24	e17	e13	16	e12	42	e22
14	19	19	31	21	26	e23	19	e15	e13	e11	34	e20
15	16	19	28	20	28	e23	19	e14	e13	e11	81	e18
16	15	22	27	21	27	e23	30	e14	e13	e11	101	e18
17	15	21	30	21	27	e23	22	e14	e13	18	e20	e15
18	15	21	59	67	27	e23	24	e14	e15	19	e15	e15
19	15	19	52	96	25	e23	23	e15	23	23	e12	e15
20	15	19	44	40	25	e23	21	e15	e15	e20	37	e15
21	15	19	37	34	23	e23	22	e13	e12	e19	29	e15
22	14	19	30	31	24	e22	27	e13	e12	e18	e18	e15
23	18	20	27	29	25	e22	28	e13	e12	23	e20	e15
24	20	22	27	26	25	e22	21	e13	e12	24	e15	e15
25	20	22	32	25	24	e22	21	e13	e12	44	e14	e15
26	21	21	35	25	23	e21	e18	e13	e12	84	61	e15
27	19	21	31	24	24	e21	e17	e13	e12	78	53	e15
28	17	21	29	24	24	e21	e17	18	e12	82	55	e15
29	18	21	28	27	23	e20	21	18	e12	71	40	e15
30	18	23	28	28	---	e19	20	19	19	70	37	e15
31	19	---	28	27	---	e19	---	25	---	182	28	---
TOTAL	556	618	942	864	917	715	599	478	448	1011	1390	586
MEAN	17.9	20.6	30.4	27.9	31.6	23.1	20.0	15.4	14.9	32.6	44.8	19.5
MAX	31	30	59	96	84	28	30	25	24	182	101	53
MIN	14	18	22	20	23	19	17	13	12	11	12	15
AC-FT	1100	1230	1870	1710	1820	1420	1190	948	889	2010	2760	1160

CAL YR 1987 TOTAL 10702 MEAN 29.3 MAX 271 MIN 12 AC-FT 21230
WTR YR 1988 TOTAL 9124 MEAN 24.9 MAX 182 MIN 11 AC-FT 18100

e Estimated

09473100 SAN PEDRO RIVER BELOW ARAVAIPA CREEK NEAR MAMMOTH, AZ

WATER-QUALITY RECORDS

LOCATION.--Lat 32°51'03", long 110°43'27", in SE¼NE¼SE¼ sec.5, T.7 S., R.16 E., Pinal County, Hydrologic Unit 15050203, at former gaging station, 1.0 mi downstream from mouth of Aravaipa Creek, 10 mi north of Mammoth, and 11 mi upstream from mouth.

DRAINAGE AREA.--4,360 mi^2; of which 696 mi^2 is in Mexico.

PERIOD OF RECORD.--
CHEMICAL QUALITY DATA: October 1980 to September 1986.
SUSPENDED SEDIMENT DATA: October 1980 to current year.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)
OCT 1987							
30...	1030	17	22.0	37	1.7	--	--
JAN 1988							
14...	0935	19	7.0	55	2.8	--	--
FEB							
19...	1120	14	14.0	40	1.5	--	--
APR							
06...	1505	9.7	23.0	16	0.42	1	5
JUN							
21...	1805	3.9	28.5	25	0.26	--	--
AUG							
15...	1230	32	--	7690	664	1	5
SEP							
20...	1030	11	26.5	62	1.8	--	--

DATE	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)
OCT 1987							
30...	--	--	--	--	--	--	--
JAN 1988							
14...	--	--	--	--	--	--	--
FEB							
19...	--	--	--	--	--	--	--
APR							
06...	20	35	51	68	87	90	100
JUN							
21...	--	--	--	--	--	--	--
AUG							
15...	21	39	63	87	98	100	--
SEP							
20...	--	--	--	--	--	--	--

09474000 GILA RIVER AT KELVIN, AZ

LOCATION.--Lat 33°06'10", long 110°58'33", in NE¼NW¼ sec.12, T.4 S., R.13 E. , Pinal County, Hydrologic Unit 15050100, on left bank at Kelvin, 500 ft downstream from Mineral Creek, 18 mi downstream from San Pedro River, and 19 mi upstream from Ashurst-Hayden Dam.

DRAINAGE AREA.--18,011 mi^2, of which 5,125 mi^2 is below Coolidge Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1911 to current year.

REVISED RECORDS.--WSP 329: 1911. WSP 609: 1916(M). WSP 629: 1914-17. WSP 1119: 1913, 1915, 1917(M), 1921(M), 1922-23, 1927(M). WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,745.02 ft above National Geodetic Vertical Datum of 1929. Prior to June 15, 1914, and Dec. 1, 1914, to Aug. 31, 1915, nonrecording gages at several sites within 2 mi of present site at different datums. Sept. 1, 1915, to Sept. 30, 1963, water-stage recorder at site 900 ft downstream at datum 1.80 ft lower. Since Jan. 16, 1985, supplementary water-stage recorder at same site.

REMARKS.--Records good. Large diversions above station for irrigation, of which about 90 percent is above Coolidge Dam. About 82,000 acres irrigated, a considerable portion by pumping from ground water. Flow regulated by San Carlos Reservoir 49 mi upstream since Nov. 15, 1928. (See sta 09469000.) San Pedro River contributes major portion of unregulated inflow.

AVERAGE DISCHARGE (adjusted for storage in San Carlos Reservoir).--77 years, 505 ft^3/s, 365,900 acre-ft/yr; median of yearly mean discharges, 340 ft^3/s, 246,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1911-28: Maximum discharge, about 132,000 ft^3/s Jan. 20, 1916, gage height, 19.5 ft, site and datum then in use, from rating curve extended above slope-area measurement at gage height, 16.2 ft for flood of Sept. 28, 1926; no flow Feb. 25, 1913.

1929-88: Maximum discharge, 100,000 ft^3/s Oct. 2, 1983, gage height, 33.0 ft from floodmark, from rating curve extended above 12,000 ft^3/s on basis of peak discharge computed by step-backwater method at Hayden Railroad Bridge, 17.8 mi upstream, and by flood-routing; minimum daily, 0.1 ft^3/s June 25, 1961.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 25	1500	*4,080	*9.44

Minimum daily discharge, 34 ft^3/s, Oct. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	128	42	79	e100	77	572	880	172	1110	1400	e1400	1060
2	120	64	75	e90	88	607	912	180	1100	1390	e1300	1080
3	115	57	76	e90	134	716	908	191	1100	1390	e1300	1040
4	108	47	75	e95	139	761	920	218	1100	1400	e1400	1080
5	101	42	71	e90	116	818	804	266	1100	1400	e1400	1080
6	105	41	80	e100	100	903	769	304	1090	1420	e1400	1020
7	126	40	115	e120	91	915	673	348	1060	1400	e1300	1030
8	123	39	123	e115	74	973	663	368	1070	1400	e1300	1000
9	122	38	167	e110	65	985	651	377	1080	1400	e1300	984
10	123	38	214	e110	62	1040	633	397	1090	1410	1310	913
11	114	38	229	e110	87	1080	619	490	1100	1450	1370	824
12	112	38	244	e110	102	1110	636	528	1100	1410	1390	819
13	115	39	256	e105	134	1110	586	567	1110	1420	1260	852
14	125	38	272	e105	185	1110	575	679	1110	1420	1220	1010
15	120	36	298	e110	195	1100	559	727	1100	1370	1340	759
16	116	37	282	e110	219	1080	547	774	1140	1370	1350	717
17	79	37	295	e120	265	1100	511	842	1200	1380	1360	629
18	63	38	278	e180	307	1100	457	910	1220	1400	1290	587
19	53	37	193	e420	316	1090	387	1020	1230	1450	1320	464
20	49	37	166	e440	317	1080	347	1060	1250	1450	1140	357
21	46	37	153	409	345	1090	317	1070	1250	1450	1620	262
22	40	37	e140	232	350	1060	269	1100	1240	1470	1530	202
23	40	42	e105	120	381	1050	192	1110	1300	1510	1270	168
24	40	44	e105	119	396	1030	146	1080	1350	1450	1110	156
25	40	51	e105	128	439	1020	130	1070	1340	1430	1160	149
26	38	70	e102	116	508	1020	121	1070	1380	1600	1160	136
27	37	79	e100	118	544	1020	122	1070	1350	1460	1390	122
28	36	80	e100	123	564	1010	135	1050	1360	1410	1170	120
29	34	81	e100	107	561	1010	150	1080	1410	1500	1240	117
30	35	80	e110	93	---	991	166	1110	1410	e1500	1390	114
31	35	---	e120	82	---	955	---	1110	---	e1400	1100	---
TOTAL	2538	1424	4828	4527	7161	30506	14785	22338	35850	44310	40590	18851
MEAN	81.9	47.5	156	146	247	984	493	721	1195	1429	1309	628
MAX	128	81	298	440	564	1110	920	1110	1410	1600	1620	1080
MIN	34	36	71	82	62	572	121	172	1060	1370	1100	114
AC-FT	5030	2820	9580	8980	14200	60510	29330	44310	71110	87890	80510	37390

CAL YR 1987 TOTAL 237219 MEAN 650 MAX 1510 MIN 34 AC-FT 470500
WTR YR 1988 TOTAL 227708 MEAN 622 MAX 1620 MIN 34 AC-FT 451700

e Estimated

09474000 GILA RIVER AT KELVIN, AZ--Continued

WATER-QUALITY RECORDS

LOCATION.--Water samples collected at Florence-Kelvin road bridge 200 ft upstream from Mineral Creek, and 700 ft upstream from gaging station.

PERIOD OF RECORD.--December 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1976.
WATER TEMPERATURES: December 1950 to September 1976.
SUSPENDED-SEDIMENT DISCHARGE: January 1958 to September 1976, daily; October 1976 to current year, monthly.

REMARKS.--No inflow from Mineral Creek between sampling point and gaging station except during infrequent periods of heavy local rains. Unpublished daily specific conductance measurements for period December 1950 to September 1964 available from district office in Tucson, Ariz.

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM (70332)	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM (70333)	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM (70334)	SED. SUSP. SIEVE DIAM. % FINER THAN 1.00 MM (70335)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
OCT 1987										
06...	1630	109	22.0	181	74	80	84	93	100	--
DEC										
01...	1530	80	11.0	57	92	96	98	100	--	--
21...	1245	164	11.0	142	82	90	92	95	100	--
JAN 1988										
08...	1245	82	11.0	96	84	89	95	100	--	--
21...	1330	385	8.0	234	88	93	95	96	100	--
FEB										
03...	0815	119	11.0	108	91	97	100	--	--	--
16...	1445	230	12.5	158	94	98	99	100	--	--
MAR										
01...	1545	576	14.0	167	76	84	93	98	100	--
15...	1730	1150	13.0	1110	7	9	14	34	74	94
29...	1400	1010	16.0	120	41	55	74	93	100	--
APR										
26...	1600	136	--	442	10	36	62	100	--	--
MAY										
11...	1645	572	20.5	2950	14	16	18	20	100	--
24...	1700	1060	18.0	1820	39	48	63	84	100	--
JUN										
07...	1100	1090	17.0	1730	28	38	51	76	100	--
23...	1045	1290	--	3610	28	37	46	66	100	--
JUL										
14...	1130	1390	--	2050	36	48	61	82	100	--
26...	1545	1780	--	50600	--	--	98	99	100	--
AUG										
09...	1830	1290	--	5430	--	79	87	95	100	--
22...	1650	1450	25.0	33800	94	94	95	96	98	100
SEP										
08...	1230	1000	25.5	3340	68	81	89	95	100	--
20...	1530	303	23.0	1650	--	93	96	98	100	--

09474000 GILA RIVER AT KELVIN, AZ--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	BED MAT. SIEVE DIAM. % FINER THAN .062 MM (80164)	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)
OCT 1987							
06...	1630	109	1	2	5	30	64
DEC							
01...	1530	80	--	0	1	11	49
21...	1245	164	0	1	2	17	45
JAN 1988							
08...	1245	82	--	0	3	24	62
21...	1330	385	--	--	0	6	50
FEB							
03...	0815	119	--	2	5	20	49
16...	1445	230	1	3	6	14	51
MAR							
01...	1545	576	--	--	1	8	42
15...	1730	1150	3	12	20	34	66
29...	1400	1010	--	2	11	31	70
APR							
26...	1600	136	--	2	3	18	57
MAY							
11...	1645	572	--	1	4	17	52
24...	1700	1060	--	--	--	--	--
JUN							
07...	1100	1090	--	1	4	13	40
23...	1045	1290	--	--	1	3	12
JUL							
14...	1130	1390	--	--	2	17	54
26...	1545	1780	--	--	--	--	--
AUG							
09...	1830	1290	--	--	--	--	--
22...	1650	1450	--	--	--	--	--
SEP							
08...	1230	1000	--	--	--	--	--
20...	1530	303	--	--	--	--	--

DATE	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
OCT 1987						
06...	77	81	82	83	83	100
DEC						
01...	83	96	100	--	--	--
21...	72	91	99	100	--	--
JAN 1988						
08...	84	95	100	--	--	--
21...	93	99	100	--	--	--
FEB						
03...	73	90	100	--	--	--
16...	86	97	100	--	--	--
MAR						
01...	75	89	97	100	--	--
15...	81	89	92	93	100	--
29...	92	98	100	--	--	--
APR						
26...	87	97	100	--	--	--
MAY						
11...	79	82	98	100	--	--
24...	--	--	--	--	--	--
JUN						
07...	70	8	96	99	100	--
23...	49	82	92	96	100	--
JUL						
14...	72	83	91	99	100	--
26...	--	--	--	--	--	--
AUG						
09...	--	--	--	--	--	--
22...	--	--	--	--	--	--
SEP						
08...	--	--	--	--	--	--
20...	--	--	--	--	--	--

DIVERSION FROM GILA RIVER

09475500 FLORENCE-CASA GRANDE CANAL, NEAR FLORENCE, AZ

LOCATION.--Lat 33°05'15", long 111°17'10", in NE¼NE¼ sec.14, T.4 S., R.10 E., Pinal County, Hydrologic Unit 15050100, on left bank at China Wash, 2.6 mi downstream from head at Ashurst-Hayden Dam and 7.5 mi northeast of Florence.

PERIOD OF RECORD.--January 1928 to current year (monthly diversions only). Published as a supplement to records for Gila River at Ashurst-Hayden Dam, 1928-80.

GAGE.--Water-stage recorder and Parshall flume. Prior to Jan. 12, 1937, water-stage recorder 900 ft downstream from Ashurst-Hayden Dam.

REMARKS.--Records show monthly diversion from the Gila River at Ashurst-Hayden Dam for irrigation of land under the 100,000 acre San Carlos Project. Diversion records are those at the canal gaging station at the flume 2.6 mi downstream from dam; values are adjusted for sluicing through the dam or from the canal and pumping of water into the canal between the dam and the flume, but are not adjusted for natural losses. Adjusted values show water available at Ashurst-Hayden Dam, except for spill over the dam or water sluiced through the dam during times of flood runoff.

COOPERATION.--Pumping records furnished by Bureau of Indian Affairs.

MONTHLY DIVERSIONS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Month	Discharge, in cubic feet per second			Diversions in acre-feet	Water sluiced above flume (acre-feet)
	Maximum	Minimum	Mean		
October	127	0	55.8	3,430	0
November	68	0	9.13	543	0
December	285	63	141	8,680	0
CAL YR 1987	1,250	0	586	425,190	319
January	453	61	145	8,920	0
February	518	70	225	12,930	0
March	1,[illegible]60	531	915	56,250	184
April	831	121	429	25,520	0
May	1,050	160	654	40,240	0
June	1,320	995	1,140	67,630	0
July	1,380	1,080	1,320	80,950	60
August	1,370	1,040	1,220	75,330	20
September	1,000	129	644	38,310	0
WTR YR 1988	1,380	0	577	418,730	405

09479500 GILA RIVER NEAR LAVEEN, AZ

LOCATION.--Lat 33°15'25", long 112°09'59", in SW¼NW¼ sec.16, T.2 S., R.2 E., Pinal County, Hydrologic Unit 15050100, in Gila River Indian Reservation, on left abutment of highway bridge, 2.1 mi upstream from Santa Cruz River, 2.6 mi south of Komatke, and 7.3 mi south of Laveen.

DRAINAGE AREA.--20,615 mi^2, of which 696 mi^2 is in Mexico.

PERIOD OF RECORD.--January 1940 to September 1946, December 1947 to current year.

GAGE.--Water-stage recorder above concrete diversion dam. Datum of gage is 1,018.90 ft above National Geodetic Vertical Datum of 1929. Since July 9, 1969, supplementary water-stage recorder on overflow channel at highway bridge 0.2 mi south at same datum. Oct. 16, 1940, to July 8, 1969, supplementary staff gage or water-stage recorder on overflow channel at datum 0.23 ft lower.

REMARKS.--No estimated daily discharges. Records fair. Records include flow over dam and in overflow channel. Large diversions above station for irrigation. Most low flow is waste water from irrigated lands and from Chandler, Arizona treatment plant (1979-83). Flow partly regulated by storage in San Carlos Reservoir. (See elsewhere in this report.)

AVERAGE DISCHARGE.--46 years (water years 1941-46, 1949-88), 34.5 ft^3/s, 25,000 acre-ft/yr; median of yearly mean discharges, 11 ft^3/s, 8,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35,000 ft^3/s Oct. 4, 1983, gage height, 12.08 ft main gage, 12.34 ft overflow gage, result of flow routing computation; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16 ft^3/s, Dec. 18, gage height, 3.96 ft main gage (no flow at overflow gage); no flow most of year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	1.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	2.1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.30	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.39	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	9.1	.04	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	5.9	.11	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.05	2.6	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.46	1.0	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	1.7	.00	.00	.00	.28	.00	.00	.00	.05	.00
23	.00	.00	1.2	.00	.00	.00	.62	.00	.00	.00	.33	.00
24	.00	.00	1.3	.00	.00	.00	.00	.00	.00	.00	.03	.00
25	.00	.00	.22	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	1.0	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.67	.00	---
TOTAL	0.00	3.75	23.71	0.15	0.00	0.00	0.90	0.00	0.00	1.67	0.41	0.00
MEAN	.00	.12	.76	.005	.00	.00	.030	.00	.00	.054	.013	.00
MAX	.00	2.1	9.1	.11	.00	.00	.62	.00	.00	1.0	.33	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	7.4	47	.3	.0	.0	1.8	.0	.0	3.3	.8	.0

CAL YR 1987 TOTAL 32.46 MEAN .089 MAX 9.1 MIN .00 AC-FT 64
WTR YR 1988 TOTAL 30.59 MEAN .084 MAX 9.1 MIN .00 AC-FT 61

09480000 SANTA CRUZ RIVER NEAR LOCHIEL, AZ

LOCATION.--Lat 31°21'19", long 110°35'20", in SW¼ sec.11, T.24 S., R.17 E. (unsurveyed), Santa Cruz County, Hydrologic Unit 15050301, on southern border of Spanish land grant of San Rafael, near left bank on downstream side of pier of bridge on county road, 1.7 mi upstream from international boundary, and 2.5 mi northeast of Lochiel.

DRAINAGE AREA.--82.2 mi^2.

PERIOD OF RECORD.--January 1949 to current year.

REVISED RECORDS.--WSP 1733: 1951.

GAGE.--Water-stage recorder. Elevation of gage is 4,620 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Small diversions for irrigation of 200 acres above station, mostly by pumping from ground water.

AVERAGE DISCHARGE.--39 years, 4.02 ft^3/s, 2,910 acre-ft/yr; median of yearly mean discharges, 2.3 ft^3/s, 1,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,000 ft^3/s Oct. 9, 1977 and Aug. 15, 1984, gage height, 10.21 ft and 10.2 ft respectively, from rating curve extended above 1,600 ft^3/s on basis of slope-area measurement at gage height 10.21 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 23	0045	*804	*5.07

Minimum daily discharge, 0.09 ft^3/s, June 8, 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	.74	.62	.80	.80	.84	.58	.45	.34	.26	5.0	3.8
2	.53	.71	.62	.80	.81	.91	.61	.46	.34	.26	3.7	4.5
3	.53	.71	.62	.80	.84	.34	.62	.46	.25	.26	7.5	5.4
4	.53	.71	.57	.80	.80	.80	.64	.45	.18	.30	1.8	5.6
5	.51	.71	.56	.82	.80	.80	.63	.46	.12	.29	.74	6.0
6	.52	.71	.60	.85	.80	.80	.66	.49	.10	.19	2.6	6.1
7	.53	.71	.63	.85	.80	.80	.67	.52	.10	.22	.92	6.1
8	.53	.71	.65	.85	.80	.81	.67	.49	.09	.34	.79	6.0
9	.53	.71	.67	.85	.83	.80	.66	.49	.09	.27	.77	6.0
10	.51	.71	.67	.85	.60	.82	.67	.49	12	.29	.74	6.0
11	.52	.71	.66	.85	.76	.83	.67	.49	.16	.33	.73	10
12	.53	.71	.67	.85	.76	.81	.65	.49	.21	.33	.71	21
13	.53	.71	.67	.85	.76	.83	.68	.47	.23	.31	.71	6.2
14	.60	.70	.64	.85	76	.83	.71	.35	.27	.29	.75	5.8
15	.58	.65	.59	.85	.76	.82	.67	.33	.31	.28	.78	5.5
16	.58	.63	.61	.85	.76	.83	.71	.35	.31	.30	.73	5.4
17	.58	.64	.78	.86	.76	.82	.65	.33	.31	.31	.75	5.3
18	.58	.64	.81	1.1	.78	.80	.61	.36	.30	.37	.76	5.1
19	.59	.61	.71	1.0	.80	.80	.58	.38	.33	.57	.76	4.9
20	.59	.58	.71	.90	.80	.80	.60	.43	.34	.50	.81	5.4
21	.61	.58	.71	.85	.80	.79	.65	.45	.25	.43	.84	5.2
22	.62	.58	.71	.86	.80	.76	.67	.46	.31	.41	16	4.7
23	.67	58	.74	.89	.80	.73	.63	.46	.31	.37	74	4.4
24	.62	.58	.76	.83	.80	.63	.47	.46	.31	.56	6.5	4.1
25	.62	.60	.79	.80	.80	.60	.38	.46	.32	.57	1.4	3.9
26	.63	.63	.76	.80	.80	.58	.37	.45	32	.69	1.4	3.8
27	.62	.63	.76	.80	.81	.59	.39	.36	.31	12	12	3.7
28	.62	.63	.76	.80	.88	.55	.46	.28	.28	4.8	3.1	3.6
29	.65	.63	.76	.80	.95	.54	.47	.24	.26	.60	1.9	3.5
30	.66	.64	.78	.80	---	.52	.46	.25	.26	6.5	2.0	3.4
31	.66	---	.80	.80	---	.55	---	.31	---	2.1	2.9	---
TOTAL	17.92	19.79	21.39	26.26	23.22	23.23	17.89	12.92	7.53	35.30	154.09	170.4
MEAN	.58	.66	.69	.85	.80	.75	.60	.42	.25	1.14	4.97	5.68
MAX	.67	.74	.81	1.1	.95	.91	.71	.52	.35	12	74	21
MIN	.51	.58	.56	.80	.75	.52	.37	.24	.09	.19	.71	3.4
AC-FT	36	39	42	52	46	46	35	26	15	70	306	338

CAL YR	1987	TOTAL	353.46	MEAN	.97	MAX	41	MIN	.08	AC-FT	701
WTR YR	1988	TOTAL	529.94	MEAN	1.45	MAX	74	MIN	.09	AC-FT	1050

09480500 SANTA CRUZ RIVER NEAR NOGALES, AZ

LOCATION.--Lat 31°20'40", long 110°51'03", in NW¼ sec.18, T.24 S., R.15 E. (unsurveyed), Santa Cruz County, Hydrologic Unit 15050301, in Spanish land grant of Maria Santisima del Carmen, on left bank 0.8 mi downstream from international boundary and 5.5 mi east of Nogales.

DRAINAGE AREA.--533 mi^2, of which 348 mi^2 is in Mexico.

PERIOD OF RECORD.--March to November 1907 and April 1909 to December 1912 (discharge measurements and fragmentary gage-height record), January 1913 to June 1922 (October 1915 to September 1916 monthly discharge only), May 1930 to December 1933, July 1935 to current year. Water-year estimates for 1913, 1915-16, 1920-22, 1930, 1934-35, published in WSP 1733.

REVISED RECORDS.--WSP 959: 1935(M). WSP 1213: 1915-16, 1930-32(M), 1934(M), 1936-37(M). WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,702.54 ft above National Geodetic Vertical Datum of 1929 (levels by International Boundary and Water Commission). Prior to June 30, 1922, nonrecording gage or water-stage recorder at various sites 5 to 6 mi downstream at different datums.

REMARKS.--Records poor. Diversions above station of about 4,300 acre-ft/yr for irrigation of about 2,150 acres in Mexico in 1977. Diversion 19 mi upstream for municipal supply of city of Nogales, Sonora, began in 1949; diversion in 1968 totaled 3,500 acre-ft/yr.

AVERAGE DISCHARGE.--69 years (water years 1913-22, 1930-88), 28.4 ft^3/s, 20,580 acre-ft/yr; median of yearly mean discharges, 19 ft^3/s, 13,800 acre-ft/yr.

EXTREMES FOR PERIOD 1930-88.--Maximum discharge, 31,000 ft^3/s Oct. 9, 1977, gage height, 15.5 ft, from rating curve extended above 1,660 ft^3/s on basis of slope-area measurement of peak flow; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Sept. 12	0345	*2,940	*7.13

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	.67	.35	e2.6	14	7.6	2.4	1.6	.59	.00	39	37
2	.29	.47	.35	e2.6	14	12	2.3	1.5	.59	.00	18	27
3	.25	.42	.35	e2.6	14	14	2.3	1.3	.56	.00	20	23
4	.24	.40	.35	e2.6	14	12	2.3	1.1	.50	.00	8.5	19
5	.25	.39	.40	e2.6	16	10	2.2	.72	.45	.00	7.1	15
6	.25	.41	.42	e2.6	13	9.9	2.0	.61	.43	.00	3.7	13
7	.25	.42	.47	e2.6	13	9.1	1.8	.58	.43	.00	20	12
8	.22	.42	.49	2.6	13	8.2	1.9	.65	.33	.00	39	9.5
9	.25	.33	.49	2.6	12	8.2	1.8	.84	.28	.00	17	7.3
10	.25	.39	.49	2.7	12	8.1	1.6	.89	.28	.00	1.8	5.8
11	.28	.41	.49	3.0	11	7.4	1.7	.92	.21	5.4	12	141
12	.29	.42	.49	3.0	11	6.5	1.7	.86	.21	.47	9.8	934
13	.28	.42	e.49	3.0	10	6.5	3.1	.82	.14	.21	3.0	253
14	.33	.42	e.49	3.0	9.2	6.3	6.6	.73	.14	.00	3.5	102
15	.36	.42	e.49	3.3	8.8	5.9	4.9	.66	.14	.00	.96	75
16	.34	.42	e.49	3.5	9.7	5.5	13	.71	.14	.00	.42	54
17	.32	.46	e.49	7.0	9.7	5.4	6.4	.56	.14	.00	.34	37
18	.32	.47	e225	17	9.1	5.3	4.4	.46	.14	18	.28	29
19	.33	.44	e17	e34	8.4	4.5	3.6	.45	.20	34	7.4	23
20	.33	.42	e2.6	21	7.6	3.9	2.8	.43	.27	7.8	1.0	20
21	.36	.44	e2.6	16	7.6	3.9	2.7	.36	.41	33	.29	21
22	.42	.39	e2.6	14	7.6	3.6	2.8	.34	.23	27	5.4	18
23	.42	.35	e2.6	13	7.6	3.5	2.4	.39	.08	1.2	169	14
24	.39	.40	e2.6	13	7.6	3.8	2.2	.50	.07	.33	483	12
25	.40	.36	e23	13	7.6	3.8	2.1	.57	.01	.14	276	11
26	.39	.40	e2.6	14	8.4	3.7	2.2	.59	.00	3.5	141	9.6
27	.38	.44	e2.6	13	8.4	3.5	1.9	.56	.00	22	152	8.9
28	.38	.37	e2.6	13	8.4	3.6	2.0	.52	.00	53	200	7.8
29	.42	.35	e2.6	14	7.6	3.1	2.2	.52	.00	28	127	6.7
30	.42	.34	e2.6	14	---	2.9	1.7	.54	.00	55	90	6.4
31	.47	---	e2.6	14	---	2.5	---	.60	---	42	59	---
TOTAL	24.88	12.52	301.19	274.9	300.3	194.2	91.0	21.94	6.97	331.05	1915.49	1952.0
MEAN	.80	.42	9.72	8.87	10.4	6.26	3.03	.71	.23	10.7	61.8	65.1
MAX	15	.67	225	34	16	14	13	1.6	.59	55	483	934
MIN	.22	.34	.35	2.6	7.6	2.5	1.6	.34	.00	.00	.28	5.8
AC-FT	49	25	597	545	596	385	180	44	14	657	3800	3870

CAL YR 1987 TOTAL 3246.55 MEAN 8.89 MAX 555 MIN .00 AC-FT 6440
WTR YR 1988 TOTAL 5426.44 MEAN 14.8 MAX 934 MIN .00 AC-FT 10760

e Estimated

09482500 SANTA CRUZ RIVER AT TUCSON, AZ

LOCATION.--Lat 32°13'19", long 110°58'52", in SE¼SE¼ sec.11, T.14 S., R.13 E., Pima County, Hydrologic Unit 15050301, on right bank, 300 ft downstream from Congress Street Bridge, in Tucson.

DRAINAGE AREA.--2,222 mi^2, of which 395 mi^2 is in Mexico, adjusted for 15.2 mi^2 of Tucson Arroyo drainage area contributing to this station effective July 1956.

PERIOD OF RECORD.--October 1905 to September 1981 (monthly discharge only, January 1907 to September 1912, January to September 1914), June 1986 to current year (discharge above 500 ft^3/s only).

REVISED RECORDS.--WSP 859: 1915(M). WSP 1283: Drainage area. WSP 1313: 1939(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 2,320.68 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 27, 1929, nonrecording gages or reference points for measuring to water surface at various places on Congress Street bridge at various datums. Nov. 27, 1929 to Sept. 30, 1981, water-stage recorder at Congress Street bridge: at datum 6.22 ft higher Nov. 27, 1929 to June 18, 1958; at datum 2.22 ft higher June 18, 1958 to May 21, 1963; at datum 3.48 ft lower May 21, 1963 to Oct. 27, 1970; at datum 2.86 ft lower Oct. 1, 1971 to Sept. 30, 1981. No gage Oct. 27, 1970 to Oct. 1, 1971, and Oct. 10, 1977, to Feb. 14, 1978.

REMARKS.--Records fair. Only daily discharges above 500 ft^3/s are published. Irrigation above station of about 26,000 acres, including about 2,300 acres in Mexico, mostly by pumping from ground water. Ground water is also pumped above the station for municipal supply and mining. From October 1969 to September 1981, all flow past station was published, including waste water when known.

AVERAGE DISCHARGE.--76 years (1906-81), 22.7 ft^3/s, 16,450 acre-ft/yr; median of yearly mean discharges, 14 ft^3/s, 10,100 acre-ft/yr.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1892, 52,700 ft^3/s, from slope-area measurement of peak flow, Oct. 2, 1983; gage height, 22.2 ft, from floodmark, at site and datum used in 1981.

Maximum discharge during the 1985 water year was 10,000 ft^3/s Dec. 28, 1984; gage height, 12.5 ft, at site and datum used in 1981.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,700 ft^3/s Oct. 10, 1977, gage height, 21.8 ft, from flood-marks, from rating curve extended above 4,000 ft^3/s on basis of slope-area measurement of peak flow; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 27	2300	1,710	4.79	Aug. 27	2130	2,690	5.35
Aug. 23	1550	*10,700	*8.90				

REVISIONS.--The maximum discharge reported for water years 1986 and 1987 have been revised to 2,700 ft^3/s, July 21, 1986, gage height, 5.45 ft, and 2,040 ft^3/s, about Aug. 2, 1987, gage height, 5.03 ft, superseding figures published in the report for 1987.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	1540	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

09486100 CANADA DEL ORO NEAR ORACLE JUNCTION, AZ

LOCATION.--Lat 32°33'54", long 110°50'48", in NE¼SE¼NE¼ sec.13, T.10 S., R.14 E., Pinal County, Hydrologic Unit 15050301, on right bank 1.5 mi upstream from Golder Dam, 5.1 mi east of Oracle Junction and 12 mi upstream from Big Wash.

DRAINAGE AREA.--42.3 mi^2.

PERIOD OF RECORD.--January 1984 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 9, 1986 at site 20 ft downstream at datum 1.34 ft lower.

REMARKS.--No estimated daily discharges. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,040 ft^3/s Aug. 21, 1988, gage height, 5.59 ft; no flow for many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 2,800 ft^3/s Oct. 2, 1983, gage height, 8.09 ft, from crest-stage gage; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 75 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 21	1815	*1,040	*5.59

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	1.1	3.1	1.9	.87	.90	.00	.00	.00	3.4
2	.00	.00	.00	1.0	2.8	2.2	.87	.87	.00	.00	1.1	3.3
3	.00	.00	.00	.95	3.5	2.0	.84	.83	.00	.00	.00	3.7
4	.00	.00	.00	.93	5.9	1.8	.80	.78	.00	.00	.00	3.0
5	.00	.00	.00	.90	8.1	1.7	.77	.75	.00	.00	.00	2.4
6	.00	.00	.00	1.0	6.0	1.6	.77	.75	.00	.00	.00	2.0
7	.00	.00	.00	1.1	4.9	1.5	.80	.75	.00	.00	.00	1.4
8	.00	.00	.00	1.0	5.1	1.5	.76	.75	.00	.00	.00	1.1
9	.00	.00	.00	1.0	3.5	1.5	.73	.73	.00	.00	.00	.93
10	.00	.00	.00	1.0	3.1	1.4	.67	.68	.00	.00	.00	.85
11	.00	.00	.00	1.0	2.8	1.4	.59	.64	.00	.00	.42	1.0
12	.00	.00	.00	.96	2.6	1.2	.70	.56	.00	.00	.00	1.3
13	.00	.00	.00	.95	2.4	1.2	.69	.54	.00	.00	.00	1.2
14	.00	.00	.00	.93	2.2	1.2	1.1	.45	.00	.00	.99	.84
15	.00	.00	.00	.90	2.1	1.1	4.0	.41	.00	.00	.00	.76
16	.00	.00	.00	.90	1.9	1.0	4.1	.30	.00	.00	.00	.75
17	.00	.00	.40	1.6	1.7	1.0	2.5	.13	.00	.00	.00	.72
18	.00	.00	2.9	7.3	1.7	.95	2.3	.02	.00	.00	.00	.65
19	.00	.00	1.3	3.7	1.5	.95	2.1	.00	.00	.00	.00	.36
20	.00	.00	1.2	2.6	1.4	.90	3.3	.00	.00	.00	3.0	.07
21	.00	.00	.94	2.3	1.4	.90	4.8	.00	.00	.00	41	.00
22	.00	.00	.84	2.0	1.3	.89	3.3	.00	.00	.00	16	.00
23	.00	.00	.84	1.8	1.2	.86	2.8	.00	.00	.00	8.1	.00
24	.00	.00	1.8	1.8	1.1	.85	2.6	.00	.00	.00	4.8	.00
25	.00	.00	1.9	1.8	1.1	.85	2.3	.00	.00	.00	3.4	.00
26	.00	.00	1.5	1.8	1.1	.85	2.1	.00	.00	.00	3.7	.00
27	.00	.00	1.2	2.1	1.6	.85	1.3	.00	.00	.00	4.8	.00
28	.00	.00	1.1	2.5	1.8	.83	1.5	.00	.00	.00	7.1	.00
29	.00	.00	1.3	2.7	1.8	.87	1.3	.00	.00	.00	7.9	.00
30	.00	.00	1.4	2.9	---	.86	1.0	.00	.00	.00	5.6	.00
31	.00	---	1.2	3.1	---	.85	---	.00	---	.00	4.4	---
TOTAL	0.00	0.00	19.82	55.62	78.7	37.46	53.06	10.84	0.00	0.00	112.31	10.23
MEAN	.00	.00	.64	1.79	2.71	1.21	1.77	.35	.00	.00	3.62	1.01
MAX	.00	.00	2.9	7.3	8.1	2.2	4.8	.90	.00	.00	41	3.7
MIN	.00	.00	.00	.90	1.1	.83	.67	.00	.00	.00	.00	.00
AC-FT	.0	.0	39	110	156	74	105	22	.0	0	223	60

CAL YR 1987 TOTAL 1439.74 MEAN 3.94 MAX 39 MIN .00 AC-FT 2860
WTR YR 1988 TOTAL 398.04 MEAN 1.09 MAX 41 MIN .00 AC-FT 790

09489000 SANTA CRUZ RIVER NEAR LAVEEN, AZ

LOCATION.--Lat 33°13'56", long 112°10'08", in NE¼NE¼ sec 29, T.2 S., R.2 E., Pinal County, Hydrologic Unit 15050303, in Gila River Indian Reservation, on downstream side of highway bridge, 3.4 mi upstream from mouth, 4.3 mi south of Komatke, and 9 mi south of Laveen.

DRAINAGE AREA.--8,581 mi².

PERIOD OF RECORD.--January 1940 to September 1946, December 1947 to current year.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,020.86 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Many diversions above station, mostly by pumping from ground water, for municipal uses and for irrigation of about 240,000 acres, not including San Carlos Project. Much of the low flow passing this station is drainage and wasteway return from irrigated lands upstream and pumpage from ground water.

AVERAGE DISCHARGE.--46 years (water years 1941-46, 1949-88), 21.2 ft³/s, 15,360 acre-ft/yr; median of yearly mean discharges, 10 ft³/s, 7,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,000 ft³/s Oct. 4, 1983, gage height, 19.74 ft, from flow-routing computation; no flow for most of time in recent years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 380 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 27	0315	*310	*10.63

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	26	3.3	2.4	2.1	2.3	1.7	.60	e.00	.00	27	34
2	.79	19	3.8	2.5	2.4	3.2	2.4	1.8	e.00	.00	18	4.9
3	.07	21	3.3	2.7	4.1	2.5	3.2	1.4	e.00	.00	18	2.6
4	.00	5.7	2.7	2.2	4.6	1.7	4.0	.51	e.00	.00	17	2.6
5	.00	2.7	2.3	1.6	4.3	2.4	2.7	.00	e.00	.00	16	2.4
6	.97	1.4	2.3	1.2	3.0	2.7	2.2	e.00	e.00	.00	18	2.6
7	1.8	.86	2.4	.85	3.1	2.7	1.8	e.00	e.00	.00	16	2.6
8	1.0	.49	2.0	1.4	3.3	2.5	1.4	e.00	e.00	.00	10	2.2
9	.31	.23	1.8	2.1	3.0	2.4	.88	e.00	e.00	.00	8.0	1.5
10	.00	.01	1.7	1.8	2.3	2.6	.71	e.00	e1.1	.00	12	1.2
11	.00	.00	3.2	1.9	2.0	2.1	.42	e.00	e1.0	.00	10	.50
12	.00	.00	2.6	2.4	2.8	1.5	2.5	e.00	.00	.00	3.3	.86
13	.00	.00	1.8	2.3	1.1	1.6	5.4	e.00	.00	.00	1.1	2.4
14	.00	.00	1.4	1.8	1.6	1.7	7.6	e.00	.00	.00	.70	4.4
15	.00	.00	.95	1.6	1.5	1.7	6.8	e.00	.00	.00	.54	3.1
16	.00	.84	.74	1.6	1.1	2.3	4.6	e.00	.00	.00	1.5	5.2
17	.42	1.0	8.6	2.6	.86	2.7	17	e.00	.00	.00	1.1	2.6
18	1.8	.66	148	38	.75	2.1	15	e.00	.00	.00	.39	1.7
19	1.4	.35	23	7.2	.57	3.3	22	e.00	.00	.00	.55	2.3
20	1.8	.06	3.5	3.1	.48	3.7	13	e.00	.00	.00	1.0	6.1
21	1.5	.00	2.6	2.6	.37	3.2	8.7	e.00	.00	.00	35	4.8
22	1.4	.00	1.9	2.1	.45	2.9	20	e.00	.00	.00	215	2.6
23	1.2	.00	1.3	1.7	2.0	3.4	31	e.00	.00	.00	89	1.8
24	11	.00	1.0	1.9	1.9	2.8	15	e.00	.00	.00	27	.59
25	4.6	.00	.86	2.0	1.7	2.7	2.7	e.00	.00	.00	146	.95
26	2.6	.20	.81	1.7	1.6	3.5	1.1	e.00	.00	.00	63	.60
27	3.1	1.8	.75	1.3	2.1	3.2	.45	e.00	.00	.31	134	1.2
28	2.2	2.3	1.2	1.1	2.2	2.4	.32	e.00	.00	87	10	2.0
29	1.6	2.1	1.0	.91	3.0	2.5	1.8	e.00	.00	12	9.0	.85
30	1.2	1.7	.97	.79	---	2.2	1.1	e.00	.00	48	3.2	.59
31	1.1	---	2.4	.69	---	2.0	---	e.00	---	25	39	---
TOTAL	43.56	88.40	234.18	98.04	59.63	80.5	196.40	4.31	2.10	172.31	953.38	101.74
MEAN	1.41	2.95	7.55	3.16	2.06	2.60	6.55	.14	.070	5.56	30.8	3.39
MAX	11	26	148	38	4.6	3.7	31	1.8	1.1	87	215	34
MIN	.00	.00	.74	.69	.37	1.5	.32	.00	.00	.00	.39	.50
AC-FT	86	175	464	194	118	160	390	8.5	4.2	342	1890	202

CAL YR	1987	TOTAL	792.18	MEAN	2.17	MAX	148	MIN	.00	AC-FT	1570
WTR YR	1988	TOTAL	2034.60	MEAN	5.56	MAX	215	MIN	.00	AC-FT	4040

e Estimated

09489082 NORTH FORK THOMAS CREEK NEAR ALPINE, AZ

LOCATION.--Lat 33°40'31", long 109°16'13", in NW¼SW¼ sec.20, T.4 N., R.30 E., Greenlee County, Hydrologic Unit 15060101, on left bank, in Apache Sitgreaves National Forest, 3.0 mi upstream from confluence with Beaver Creek and 14 mi southwest of Alpine.

DRAINAGE AREA.--0.73 mi^2.

PERIOD OF RECORD.--October 1985 to current year. October 1965 to September 1985, in reports of Rocky Mountain Forest and Range Experiment Station.

GAGE.--Water stage recorder and V-notch weir. Elevation of gage is 8,380 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2.3 ft^3/s Apr. 18, 19, 20, 1987, gage height, 0.76 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.1 ft^3/s Aug. 31, Sept. 1; maximum gage height, 0.74 ft, Aug. 31; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	.02	.03	.00	.29	.14	.99	.03	.00	.05	1.7
2	.00	.00	.07	.13	.01	.26	.13	.86	.02	.00	.08	1.2
3	.00	.00	.12	.24	.01	.21	.13	.72	.02	.00	.06	.86
4	.00	.00	.08	.19	.02	.18	.12	.63	.02	.00	.06	.66
5	.00	.00	.00	.00	.02	.16	.12	.53	.01	.00	.09	.51
6	.00	.01	.00	.00	.03	.16	.12	.47	.01	.00	.11	.41
7	.00	.00	.00	.00	.03	.16	.12	.42	.01	.00	.13	.33
8	.00	.00	.00	.02	.03	.15	.15	.36	.01	.00	.22	.27
9	.00	.00	.04	.08	.03	.15	.21	.31	.01	.00	.36	.22
10	.00	.00	.01	.07	.04	.14	.23	.26	.01	.00	.30	.19
11	.00	.00	.00	.00	.05	.13	.21	.22	.01	.01	.22	.18
12	.00	.00	.00	.01	.05	.12	.20	.21	.01	.00	.17	.28
13	.00	.00	.00	.08	.06	.11	.19	.13	.00	.00	.14	.29
14	.00	.00	.00	.13	.07	.10	.21	.18	.00	.00	.12	.31
15	.00	.00	.00	.13	.07	.09	.25	.17	.00	.00	.14	.27
16	.00	.00	.00	.03	.07	.09	.54	.16	.00	.01	.46	.23
17	.00	.00	.00	.00	.08	.08	.50	.14	.00	.00	.64	.21
18	.00	.00	.00	.00	.08	.07	.42	.13	.00	.01	.51	.18
19	.00	.00	.00	.00	.07	.06	.47	.12	.00	.00	.41	.17
20	.00	.00	.00	.00	.06	.06	.67	.11	.00	.00	.34	.15
21	.00	.00	.00	.00	.06	.06	.75	.10	.00	.01	.29	.14
22	.00	.00	.00	.00	.06	.06	.68	.09	.00	.00	.25	.12
23	.00	.00	.00	.00	.07	.07	.60	.08	.00	.00	.22	.11
24	.00	.00	.00	.00	.09	.07	.60	.07	.00	.00	.21	.09
25	.00	.00	.00	.00	.11	.08	.65	.06	.00	.00	.19	.07
26	.00	.00	.00	.00	.14	.09	.72	.05	.00	.00	.17	.07
27	.00	.00	.00	.00	.20	.16	.74	.05	.00	.00	.15	.06
28	.00	.00	.00	.00	.21	.19	.78	.04	.00	.00	.15	.05
29	.00	.00	.00	.00	.22	.19	.91	.04	.00	.00	.13	.05
30	.00	.00	.00	.00	---	.18	1.0	.04	.00	.03	.11	.05
31	.00	---	.00	.00	---	.17	---	.03	---	.02	1.1	---
TOTAL	0.00	0.02	0.34	1.14	2.04	4.09	12.56	7.83	0.17	0.09	7.58	9.43
MEAN	.00	.001	.011	.037	.070	.13	.42	.25	.006	.003	.24	.31
MAX	.00	.01	.12	.24	.22	.29	1.0	.99	.03	.03	1.1	1.7
MIN	.00	.00	.00	.00	.00	.06	.12	.03	.00	.00	.05	.05
AC-FT	.0	.04	.7	2.3	4.0	8.1	25	16	.3	.2	15	19

CAL YR 1987 TOTAL 68.92 MEAN .19 MAX 2.3 MIN .00 AC-FT 137
WTR YR 1988 TOTAL 45.29 MEAN .12 MAX 1.7 MIN .00 AC-FT 90

09489500 BLACK RIVER BELOW PUMPING PLANT, NEAR POINT OF PINES, AZ

LOCATION.--Lat 33°28'36", long 109°45'48", in W sec.32, T.2 N., R.25 E. (unsurveyed), Graham County, Hydrologic Unit 15060101, in San Carlos Indian Reservation, on left bank 0.9 mi downstream from Phelps Dodge Corp. pumping plant, 1.3 mi downstream from Freezeout Creek, 8 mi northwest of Point of Pines, and 63 mi upstream from confluence with White River.

DRAINAGE AREA.--560 mi^2.

PERIOD OF RECORD.--June 1953 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,725 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Water is diverted at pumping plant 0.9 mi upstream and pumped into headwaters of Willow Creek (tributary of Eagle Creek) for mining, metallurgical treatment of ores, and domestic supply in vicinity of Morenci. (See sta 09445000.)

AVERAGE DISCHARGE (adjusted for diversion to Willow Creek).--35 years, 229 ft^3/s, 165,900 acre-ft/yr; median of yearly mean discharges, 200 ft^3/s, 145,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,900 ft^3/s Oct. 19, 1972, gage height, 18.0 ft, from flood-marks, from rating curve extended above 5,000 ft^3/s; minimum daily, 2.6 ft^3/s July 5, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 6	1645	548	3.69	Aug. 4	1530	1,010	4.27
Feb. 5	0430	726	3.92	Aug. 16	1145	678	3.79
Mar. 1	0500	1,110	4.42	Aug. 21	1800	993	4.25
Mar. 28	1030	986	4.26	Sept. 1	0015	*2,360	*6.19
Apr. 24	0800	1,590	5.13				

Minimum daily discharge, 23 ft^3/s Dec. 22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	83	48	e25	91	968	366	1140	85	52	68	1880
2	36	172	46	e26	101	825	335	989	85	52	125	1720
3	34	145	47	e27	197	670	321	853	74	53	183	1300
4	34	99	48	e28	464	554	334	724	69	52	250	886
5	34	81	51	e28	510	505	331	622	66	51	291	641
6	34	288	54	e29	338	507	316	546	64	53	247	486
7	34	310	46	e29	276	517	308	486	63	64	277	380
8	34	177	49	e30	248	498	324	436	60	74	238	306
9	34	133	47	e30	251	434	329	386	63	59	216	257
10	34	108	43	e30	262	450	306	341	56	58	186	219
11	34	93	46	e31	283	386	268	316	56	67	165	194
12	34	82	46	e30	280	328	245	282	56	59	134	290
13	36	76	46	e30	289	294	228	266	56	52	116	353
14	40	70	e40	e29	303	251	239	251	56	50	100	262
15	43	78	e40	e30	281	241	280	233	56	48	112	211
16	44	72	e45	e30	282	226	458	218	55	47	405	179
17	40	65	38	e32	286	199	760	208	56	49	445	158
18	37	66	43	e30	241	186	626	201	56	51	354	139
19	37	72	27	e30	226	174	1110	196	56	54	364	133
20	37	63	27	e30	192	183	1340	183	55	52	372	125
21	37	65	26	e30	181	219	1220	167	54	55	645	119
22	37	66	23	e30	191	280	1190	149	53	57	736	115
23	43	65	24	e30	221	342	1180	135	52	55	608	104
24	50	65	25	e30	260	453	1450	124	54	52	474	91
25	60	62	e25	e35	332	567	1310	120	55	51	367	84
26	51	58	e25	e35	434	654	1180	118	55	48	278	78
27	46	59	e24	e40	725	764	1050	111	58	48	227	73
28	43	49	e24	59	905	799	961	102	64	47	214	71
29	43	50	e24	66	953	664	1340	94	60	47	265	67
30	46	51	e24	69	---	571	1330	88	54	68	227	65
31	53	---	e25	81	---	463	---	86	---	68	962	---
TOTAL	1237	2923	1146	1089	9603	14172	21034	10171	1802	1693	9651	10986
MEAN	39.9	97.4	37.0	35.1	331	457	701	328	60.1	54.6	311	366
MAX	60	310	54	81	953	968	1450	1140	85	74	962	1880
MIN	34	49	23	25	91	174	228	86	52	47	68	65
AC-FT	2450	5800	2270	2160	19050	28110	41720	20170	3570	3360	19140	21790
(*)	54.8	112	50.8	47.4	341	471	716	341	75.1	72.6	327	378
(**)	3370	6640	3120	2910	19600	28960	42640	20980	4460	4470	20110	22490

CAL YR 1987 TOTAL 97684 MEAN 268 MAX 2180 MIN 23 AC-FT 193800 * 281 ** 203500
WTR YR 1988 TOTAL 85507 MEAN 234 MAX 1880 MIN 23 AC-FT 169600 * 248 ** 179800

e Estimated
* Adjusted for Willow Creek Diversion from Black River near Morenci.

09490500 BLACK RIVER NEAR FORT APACHE, AZ

LOCATION.--Lat 33°42'46", long 110°12'40", in NW¼ sec.12, T.4 N., R.20 E. (unsurveyed), Gila County, Hydrologic Unit 15060101, on downstream side of first pier from right bank on highway bridge, 5 mi upstream from confluence with White River and 14 mi west of Fort Apache.

DRAINAGE AREA.--1,232 mi^2.

PERIOD OF RECORD.--October 1912 to December 1915, September 1916, October 1917 to January 1918, April 1918, October 1957 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1914-15, drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,345 ft above National Geodetic Vertical Datum of 1929, river-profile map. November 1912 to July 1918, nonrecording gages or water-stage recorders at several sites within 1 mi of present site at various datums.

REMARKS.--No estimated daily discharges. Records good. One transbasin diversion for industrial and municipal use (see record of Willow Creek diversion from Black River, near Morenci). Negligible storage in several small recreational lakes.

AVERAGE DISCHARGE.--34 years (water years 1913-15, 1958-88), 426 ft^3/s, 308,600 acre-ft/yr; median of yearly mean discharges, 380 ft^3/s, 275,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,200 ft^3/s Oct. 2, 1983, gage height, 24.80 ft, from rating curve extended above 8,500 ft^3/s on basis of slope-area measurements at gage heights 22.33 ft and 24.80 ft; minimum daily, 11 ft^3/s July 6, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft^3/s and maximum (*), from rating curve extended above 8,500 ft^3/s on the basis of slope-area measurement at gage height of 22.33 ft and 24.80 ft:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 5	0745	2,850	7.17	Apr. 29	0945	3,820	8.12
Apr. 23	0030	2,680	7.01	Sept. 1	1800	*2,790	*11.67

Minimum daily discharge, 41 ft^3/s, Oct. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 198
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	92	88	104	411	1080	587	1860	145	92	116	4670
2	52	148	87	103	418	1030	512	1550	141	85	266	3660
3	49	259	86	97	1570	884	487	1300	136	83	255	2340
4	46	229	87	94	1630	755	477	1120	126	81	666	1440
5	44	167	91	110	2130	672	481	971	114	82	734	959
6	43	139	95	222	1090	646	478	859	107	77	557	701
7	42	304	98	273	707	650	469	762	104	97	519	545
8	42	362	94	170	581	664	473	679	101	100	400	451
9	41	256	88	132	523	626	488	611	97	116	335	385
10	42	202	88	111	509	583	493	548	94	129	303	336
11	45	170	86	110	504	587	470	496	96	117	277	301
12	45	149	83	110	501	531	439	468	87	121	280	295
13	46	135	88	103	488	481	416	435	87	111	233	371
14	49	126	89	99	491	456	416	413	87	94	201	370
15	55	128	72	96	492	416	430	395	85	83	342	308
16	61	128	63	96	461	405	490	374	83	78	926	266
17	60	120	84	108	466	383	761	357	82	76	594	233
18	59	115	112	406	457	347	1000	340	89	81	641	207
19	53	115	122	353	407	328	1460	332	88	163	678	185
20	50	118	133	214	386	313	1640	324	85	109	631	177
21	50	115	121	151	339	322	1700	297	83	94	678	173
22	49	114	107	141	322	364	1870	266	78	114	936	161
23	53	115	98	143	331	426	2110	242	74	104	913	154
24	59	115	95	160	367	479	1910	218	73	105	841	147
25	86	113	105	171	416	570	1810	202	77	99	676	131
26	84	110	95	163	491	655	1580	197	82	91	510	121
27	82	106	94	204	641	744	1430	188	86	92	499	113
28	71	99	84	390	956	847	1310	178	93	96	411	106
29	64	99	67	527	1040	857	2620	164	102	84	448	101
30	64	91	100	526	---	722	2350	154	99	86	439	97
31	67	---	100	503	---	663	---	149	---	91	3620	---
TOTAL	1708	4539	2900	6190	19125	18486	31157	16449	2881	3031	18925	19504
MEAN	55.1	151	93.5	200	659	596	1039	531	96.0	97.8	610	650
MAX	86	362	133	527	2130	1080	2620	1860	145	163	3620	4670
MIN	41	91	63	94	322	313	416	149	73	76	116	97
AC-FT	3390	9000	5750	12280	37930	36670	61800	32630	5710	6010	37540	38690

CAL YR 1987 TOTAL 167015 MEAN 458 MAX 3260 MIN 41 AC-FT 331300
WTR YR 1988 TOTAL 144895 MEAN 396 MAX 4670 MIN 41 AC-FT 287400

09492400 EAST FORK WHITE RIVER NEAR FORT APACHE, AZ

LOCATION.--Lat 33°49'20", long 109°48'50", in SE¼ sec.16, T.5 N., R.24 E. (unsurveyed), Apache County, Hydrologic Unit 15060102, in Fort Apache Indian Reservation, on left bank 600 ft downstream from highway bridge, 0.1 mi upstream from Rock Creek, and 10 mi east of Fort Apache.

DRAINAGE AREA.--38.8 mi^2.

PERIOD OF RECORD.--August 1957 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,050 ft above National Geodetic Vertical Datum of 1929, by barometer. Prior to Dec. 29, 1960, at site 600 ft upstream at datum 12.78 ft higher. Dec. 29, 1960, to Sept. 28, 1962, at site 600 ft upstream at datum 12.92 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--31 years, 37.3 ft^3/s, 27,020 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft^3/s Oct. 1, 1983, gage height, 5.40 ft, from rating curve extended above 1,000 ft^3/s; minimum daily, 4.0 ft^3/s Nov. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 28	2230	*211	*2.42
May 15	1945	139	2.12

Minimum daily discharge, 9.7 ft^3/s Oct. 8, 10, 12, 20, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	57	20	15	22	e53	e44	190	51	24	26	75
2	10	55	20	15	23	e49	e42	149	48	23	33	75
3	10	47	20	15	24	e46	e40	114	46	22	31	69
4	10	39	20	15	24	e42	e39	102	45	21	39	58
5	10	37	20	15	24	e40	e38	102	44	22	35	50
6	9.9	40	19	14	25	e39	43	100	43	23	32	45
7	9.8	35	19	12	25	e40	49	94	41	22	30	40
8	9.7	33	19	11	25	e39	53	88	38	31	27	37
9	9.8	30	19	12	25	e37	58	82	34	44	27	35
10	9.7	28	18	12	25	e35	58	82	32	36	25	32
11	9.8	26	18	11	26	e33	57	90	31	39	25	32
12	9.7	25	18	11	26	e30	57	98	29	33	29	33
13	11	24	18	12	27	e29	58	106	27	29	24	29
14	16	24	18	12	27	e28	62	118	26	27	28	27
15	11	22	18	13	27	e26	61	130	25	24	27	26
16	11	24	18	12	27	e25	71	132	26	25	34	25
17	10	22	18	12	27	e24	64	121	24	26	34	24
18	10	21	18	12	25	e23	67	116	24	27	54	23
19	9.8	22	17	11	23	e23	72	101	25	25	55	23
20	9.7	22	17	25	22	e25	75	91	22	32	50	24
21	9.7	22	17	40	e21	e27	81	81	21	36	49	23
22	10	22	17	54	e22	e29	78	74	20	34	53	22
23	22	22	17	38	e23	e32	72	72	21	40	55	21
24	23	21	17	15	e26	e34	72	71	21	34	52	20
25	16	21	16	20	e31	e38	71	68	24	30	52	20
26	13	20	16	21	e37	e40	81	65	25	28	47	19
27	12	20	17	22	e48	e44	89	64	26	26	50	19
28	12	20	17	22	e53	e48	114	63	25	25	52	18
29	13	20	16	22	e56	e50	184	61	23	24	49	18
30	25	20	16	22	---	e49	195	60	22	26	48	18
31	27	---	15	22	---	e47	---	56	---	26	66	---
TOTAL	389.6	841	553	565	816	1124	2145	2941	909	884	1238	980
MEAN	12.6	28.0	17.8	18.2	28.1	36.3	71.5	94.9	30.3	28.5	39.9	32.7
MAX	27	57	20	54	56	53	195	190	51	44	66	75
MIN	9.7	20	15	11	21	23	38	56	20	21	24	18
AC-FT	773	1670	1100	1120	1620	2230	4250	5830	1800	1750	2460	1940

CAL YR 1987 TOTAL 15157.6 MEAN 41.5 MAX 205 MIN 7.0 AC-FT 30070
WTR YR 1988 TOTAL 13385.6 MEAN 36.6 MAX 195 MIN 9.7 AC-FT 26550

e Estimated

09494000 WHITE RIVER NEAR FORT APACHE, AZ

LOCATION.--Lat 33°44'11", long 110°09'58", in SE¼ sec.32, T.4 N., R.21 E. (unsurveyed), Gila County, Hydrologic Unit 15060102, in Fort Apache Indian Reservation, on right bank 2,200 ft downstream from highway bridge, 4.5 mi upstream from confluence with Black River, and 11 mi west of Fort Apache.

DRAINAGE AREA.--632 mi^2.

PERIOD OF RECORD.--October 1917 to September 1918 (published as "at Wanslee's Ranch"), October 1957 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WRD Ariz. 1971: 1967(M).

GAGE.--Water-stage recorder. Datum of gage is 4,365.99 ft above National Geodetic Vertical Datum of 1929. Oct. 12, 1917, to Aug. 31, 1918, nonrecording gage at site 2,100 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Small diversions above station for irrigation of about 1,460 acres. Negligible storage above station in several small recreational lakes.

AVERAGE DISCHARGE.--32 years, 212 ft^3/s, 153,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,600 ft^3/s Dec. 18, 1978, gage height, 15.71 ft, from rating curve extended above 7,800 ft^3/s on basis of slope-area measurement of peak flow; no flow July 18-21, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 29	0745	1,460	5.39	Aug. 31	1830	*1,590	*5.59
Aug. 20	2115	1,500	5.45				

Minimum daily discharge, 50 ft^3/s, Oct. 9, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	201	77	88	143	419	253	1010	193	94	116	1290
2	57	277	79	84	142	379	241	832	170	102	142	1220
3	56	203	87	84	488	333	228	702	160	102	146	872
4	55	167	87	86	455	306	218	618	154	92	165	622
5	53	150	94	89	299	292	211	568	156	90	165	473
6	53	179	93	116	239	293	211	533	150	95	149	393
7	52	165	83	122	212	301	223	494	137	99	144	335
8	51	149	86	100	200	288	236	454	132	93	126	277
9	50	141	81	89	201	264	249	413	121	120	114	240
10	52	133	80	89	202	264	254	383	115	132	110	217
11	51	125	82	91	206	242	247	380	112	164	110	205
12	51	120	82	89	204	225	241	395	107	134	109	218
13	50	115	85	85	213	214	239	411	104	115	109	203
14	65	113	78	83	220	197	265	427	101	106	118	e190
15	75	131	70	83	207	196	282	445	97	105	187	e178
16	65	110	69	89	205	190	357	452	95	103	191	e168
17	61	114	98	93	203	175	448	432	96	102	168	e159
18	58	111	121	137	185	164	402	432	92	104	173	e151
19	55	102	106	107	179	162	540	425	99	106	194	e146
20	54	100	103	87	160	166	728	381	95	105	270	e143
21	53	102	92	93	157	173	819	338	89	119	293	e141
22	54	101	85	90	162	190	817	312	86	109	389	e134
23	61	99	89	89	170	205	717	295	84	107	416	e126
24	108	100	94	94	182	232	753	281	82	106	438	e118
25	93	95	89	87	201	251	694	271	99	104	365	e111
26	81	91	86	85	233	268	771	257	109	103	324	e103
27	72	80	79	110	365	296	799	243	113	102	333	e98
28	69	78	78	123	418	315	786	229	112	101	375	e94
29	69	84	79	126	419	301	1310	221	107	106	354	e90
30	87	84	85	133	---	285	1170	216	100	106	477	e86
31	103	---	90	154	---	264	---	213	---	125	1030	---
TOTAL	1972	3820	2687	3075	6870	7850	14709	13063	3467	3351	7800	8801
MEAN	63.6	127	86.7	99.2	237	253	490	421	116	108	252	293
MAX	108	277	121	154	488	419	1310	1010	193	164	1030	1290
MIN	50	78	69	83	142	162	211	213	82	90	109	86
AC-FT	3910	7580	5330	6100	13630	15570	29180	25910	6880	6650	15470	17460

CAL YR	1987	TOTAL	95759	MEAN	262	MAX	1800	MIN	49	AC-FT	189900
WTR YR	1988	TOTAL	77465	MEAN	212	MAX	1310	MIN	50	AC-FT	153700

e Estimated

09495000 FORESTDALE CREEK DIVERSION FROM SHOW LOW CREEK, NEAR SHOW LOW, AZ

LOCATION.--Lat 34°10'40", long 110°00'56", in SE¼NW¼ sec.16, T.9 N., R.22 E., Navajo County, Hydrologic Unit 15020005, in Sitgreaves National Forest, on right bank 170 ft downstream from terminal structure of Show Low Creek diversion works, 4,350 ft west of pumping plant on Show Low Lake, and 5 mi south of Show Low.

PERIOD OF RECORD.--May 1953 to current year.

GAGE.--Water-stage recorders and V-notch sharp-crested weir. Datum of gage is 6,621.57 ft above National Geodetic Vertical Datum of 1929 (Bureau of Reclamation bench mark).

REMARKS.--No estimated daily discharges. Records good. Entire flow consists of water pumped from Show Low Lake in Little Colorado River basin, into headwaters of Forestdale Creek in Gila River basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 28 ft^3/s June 2, 3, 5, 1973, Mar. 17-25, 27-30, Apr. 2-15, Apr. 18 to May 5, 1975; no flow for most of time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	13	.00	19	.00	9.7	15	.00	.00
2	.00	.00	.00	.00	13	.00	19	.00	15	15	.00	.00
3	.00	.00	.00	.00	13	.00	19	.00	15	15	.00	.00
4	.00	.00	.00	.00	3.5	.00	19	.00	15	15	.00	.00
5	.00	.00	.00	.00	.00	.00	19	.00	15	15	.00	.00
6	.00	.00	.00	.00	.00	.00	19	.00	15	15	.00	.00
7	.00	.00	.00	.00	.00	9.6	19	.00	15	15	.00	.00
8	.00	.00	.00	.00	.00	15	19	.00	15	15	.00	.00
9	.00	.00	.00	.00	.00	15	19	.00	15	15	.00	.00
10	.00	.00	.00	.00	.00	15	19	.00	15	15	.00	.00
11	.00	.00	.00	.00	.00	15	19	.00	15	15	.00	.00
12	.00	.00	.00	.00	.00	15	18	.00	15	15	.00	.00
13	.00	.00	.00	.00	.00	15	18	.00	15	15	.00	.00
14	.00	.00	.00	.00	.00	15	18	.00	15	15	.00	.00
15	.00	.00	.00	.00	.00	15	18	.00	15	15	.00	.00
16	.00	.00	.00	.00	.00	15	18	.00	15	15	.00	.00
17	.00	.00	.00	.00	.00	18	18	.00	15	15	.00	.00
18	.00	.00	.00	.00	.00	19	18	.00	15	15	.00	.00
19	.00	.00	.00	.00	.00	19	18	.00	15	15	.00	.00
20	.00	.00	.00	.00	.00	19	18	.00	15	15	.00	.00
21	.00	.00	.00	5.2	.00	19	17	.00	15	15	.00	.00
22	.00	.00	.00	13	.00	19	17	.00	15	4.8	.00	.00
23	.00	.00	.00	13	.00	19	15	.00	15	.00	.00	.00
24	.00	.00	.00	13	.00	19	15	.00	15	.00	.00	.00
25	.00	.00	.00	13	.00	19	15	.00	15	.00	.00	.00
26	.00	.00	.00	13	.00	19	5.6	.00	15	.00	.00	.00
27	.00	.00	.00	13	.00	19	.00	.00	15	.00	.00	.00
28	.00	.00	.00	13	.00	19	.00	.00	15	.00	.00	.00
29	.00	.00	.00	13	.00	19	.00	.00	12	.00	.00	.00
30	.00	.00	.00	13	---	19	.00	.00	9.1	.00	.00	.00
31	.00	---	.00	13	---	19	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	135.20	42.50	428.60	455.60	0.00	435.8	319.80	0.00	0.00
MEAN	.00	.00	.00	4.36	1.47	13.8	15.2	.00	14.5	10.3	.00	.00
MAX	.00	.00	.00	13	13	19	19	.00	15	15	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	9.1	.00	.00	.00
AC-FT	.0	.0	.0	268	84	850	904	.0	864	634	.0	.0

CAL YR 1987 TOTAL 836.90 MEAN 2.30 MAX 14 MIN .00 AC-FT 1660
WTR YR 1988 TOTAL 1817.50 MEAN 4.97 MAX 19 MIN .00 AC-FT 3610

09496500 CARRIZO CREEK NEAR SHOW LOW, AZ

LOCATION.--Lat 33°59'09", long 110°16'32", in sec.24, T.7 N., R.19 E. (unsurveyed), Gila County, Hydrologic Unit 15060104, in Fort Apache Indian Reservation, on right bank 500 ft upstream from bridge on U.S. Highway 60, 1 mi downstream from Corduroy Creek, 23 mi southwest of Show Low, and 24 mi upstream from mouth.

DRAINAGE AREA.--439 mi^2.

PERIOD OF RECORD.--June 1951 to June 1961, June 1967 to June 1976, October 1975 to June 1976 (monthly discharges only), April 1977 to current year.

REVISED RECORDS.--WRD Ariz. 1968: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,749.52 ft above National Geodetic Vertical Datum of 1929. Prior to June 1975 at site on bridge pier 400 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation above station of less than 300 acres. Records include trans basin diversion from Show Low Creek. (See sta 09495000.)

AVERAGE DISCHARGE.--28 years (water years 1952-60, 1968-75, 1978-88), 54.1 ft^3/s, 39,200 acre-ft/yr; median of yearly mean discharges, 33 ft^3/s, 23,900 acre-ft/yr, unadjusted for transbasin diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,500 ft^3/s Jan. 18, 1952, gage height, 12.08 ft, at site then in use, from rating curve extended above 2,000 ft^3/s on basis of slope-area measurement of peak flow; maximum gage height, 15.1 ft Dec. 18, 1978, from high-water mark; minimum daily discharge, 0.2 ft^3/s July 12, 1951, Sept. 21, 1959, at site then in use.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1951, about 24,000 ft^3/s Dec. 30, 1955, gage height, 13.0 ft, from floodmark at previous site, from rating curve extended above 2,000 ft^3/s on basis of slope-area measurement at gage height 12.08 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 3	0915	*3,650	*6.78

Minimum daily discharge, 2.9 ft^3/s Aug. 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	86	8.4	12	68	52	29	22	6.3	10	5.1	368
2	5.2	39	8.5	12	129	46	29	20	6.0	18	5.7	183
3	5.0	21	8.5	11	1930	35	29	16	16	18	6.1	62
4	4.8	14	8.5	11	732	32	29	16	18	16	4.7	36
5	4.5	14	10	11	305	27	27	15	17	16	5.2	25
6	4.4	19	11	47	191	24	27	14	17	17	5.8	19
7	4.5	14	9.6	42	142	22	27	14	17	16	5.2	15
8	4.4	11	9.5	25	114	23	27	13	17	16	4.2	13
9	4.3	10	8.9	19	98	28	26	13	17	17	3.6	11
10	4.5	9.2	8.8	17	92	31	26	12	17	19	3.3	9.8
11	4.6	8.8	8.8	15	88	30	26	12	17	17	3.3	10
12	4.7	8.5	8.8	14	79	29	27	11	16	15	3.6	15
13	4.9	8.5	9.6	13	72	29	27	11	16	14	3.3	14
14	5.5	9.1	10	12	70	28	30	10	16	14	2.9	9.7
15	5.4	13	9.4	11	60	29	29	9.7	16	14	5.0	8.6
16	5.4	9.2	9.9	12	53	28	42	9.1	17	14	9.6	7.8
17	5.4	8.6	12	15	49	27	58	9.0	17	17	5.7	7.4
18	5.2	8.4	18	40	43	29	72	9.4	17	20	5.9	7.0
19	5.2	8.5	18	34	39	29	94	11	20	22	8.1	6.7
20	5.1	8.5	19	25	32	30	128	9.8	17	17	16	7.0
21	5.1	8.5	16	23	29	31	89	9.1	16	18	42	10
22	5.3	8.5	14	24	27	31	323	8.4	15	16	60	8.3
23	9.7	8.5	13	30	26	31	281	7.9	15	12	134	7.7
24	8.5	8.5	13	32	26	30	151	7.4	16	5.9	49	7.6
25	7.3	8.5	14	30	29	30	98	7.0	20	4.7	29	7.6
26	6.6	8.5	12	30	32	30	71	6.8	18	4.0	18	7.4
27	6.5	8.5	11	33	55	29	45	6.4	18	4.1	13	7.3
28	6.3	8.3	13	38	94	29	34	6.2	19	4.7	67	7.2
29	6.3	8.3	13	50	66	29	34	5.9	19	4.7	103	7.2
30	8.2	8.3	12	82	---	28	27	5.8	17	5.5	75	7.3
31	16	---	12	84	---	29	---	6.3	---	5.4	269	---
TOTAL	184.9	412.7	358.2	854	4770	936	1962	335.2	490.3	412.0	971.3	912.6
MEAN	5.96	13.8	11.6	27.5	164	30.2	65.4	10.8	16.3	13.3	31.3	30.4
MAX	16	86	19	84	1930	52	323	22	20	22	269	368
MIN	4.3	8.3	8.4	11	26	22	26	5.8	6.0	4.0	2.9	6.7
AC-FT	367	819	710	1690	9460	1860	3890	667	973	817	1930	1810

CAL YR 1987 TOTAL 13465.1 MEAN 36.9 MAX 615 MIN 2.1 AC-FT 26710
WTR YR 1988 TOTAL 12600.2 MEAN 34.4 MAX 1930 MIN 2.9 AC-FT 24990

[illegible] SALT RIVER NEAR [illegible], AZ

LOCATION.--Lat 33°47'[illegible], long [illegible], in [illegible], T.5 N., R.[illegible] E. (unsurveyed), Gila County, Hydrologic Unit 15060103, in San Carlos [illegible] on left bank [illegible] ft upstream from bridge on U.S. Highway 60, 5.7 mi northeast of [illegible] and [illegible] mi downstream from confluence of Black and White Rivers.

DRAINAGE AREA.--2,8[illegible]

PERIOD OF RECORD.--[illegible] only July to December 1954).

REVISED RECORDS.--[illegible] 1927, 1932, 1937, 1938(M). WSP 1313. 1925-26(M), 19[illegible] drainage area.

GAGE.--[illegible] above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated [illegible] several diversions for irrigation above station of about 3,100 acres [illegible] Creek diversion from Show Low Creek, near Show Low [illegible] on the Black River, near [illegible]

AVERAGE [illegible] discharges, 5[illegible] ft³/s [illegible]

EXTREMES [illegible] gage height, 17.35 ft, from rating [illegible]

[illegible] and is believed to be the [illegible] rating curve extended above [illegible]

[illegible] and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	*[illegible]

[illegible]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6470
3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2550
5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	873
9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	248
10	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	659
11	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	412	[illegible]
12	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	395	550
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	381	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	214	364	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	445	[illegible]
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1350	510
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	761	460
18	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	202	610	420
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	214	220	651	388
20	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	843	365
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	255	[illegible]	389
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	206	272	1170	380
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	199	253	1410	356
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	190	251	1420	361
25	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	195	243	1210	323
26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	275	908	304
27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	429	234	231	907	289
28	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	452	[illegible]	234	962	274
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	435	[illegible]	245	973	267
30	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	414	255	222	985	261
31	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	403	[illegible]	[illegible]	4150	---
TOTAL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	32440	7677	7716	27864	33738
MEAN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1042	256	249	899	1125
MAX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3310	395	309	4150	6470
MIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	402	190	202	284	261
AC-FT	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	65360	15230	15300	55270	66920

CAL YR [illegible] AC-FT [illegible]
WTR YR [illegible] AC-FT [illegible]

09497800 CIBECUE CREEK NEAR CHRYSOTILE, AZ

LOCATION.--Lat 33°50'35", long 110°33'25", in E½ sec.6, T.5 N., R.17 E. (unsurveyed), Gila County, Hydrologic Unit 15060103, in Fort Apache Indian Reservation, on right bank 0.5 mi upstream from mouth and 7 mi north of Chrysotile.

DRAINAGE AREA.--295 mi^2.

PERIOD OF RECORD.--May 1959 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,200 ft above National Geodetic Vertical of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Small diversions for irrigation in the vicinity of the village of Cibecue.

AVERAGE DISCHARGE.--29 years, 46.5 ft^3/s, 33,690 acre-ft/yr; median of yearly mean discharges, 36 ft^3/s, 26,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,200 ft^3/s Sept. 2, 1977, gage height, 17.3 ft, on basis of slope-area measurement of peak flow; minimum daily, 4.1 ft^3/s Aug. 17-19, 1968.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	unknown	2,060	5.30	Aug. 17	1830	1,290	4.52
Feb. 3	unknown	1,080	4.28	Aug. 21	0130	1,690	4.93
July 19	0030	1,280	4.51	Aug. 31	1000	*2,300	*5.52

Minimum daily discharge, 13 ft^3/s July 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	431	22	22	38	91	27	45	19	16	e26	124
2	16	42	21	22	56	90	25	43	19	16	e33	e46
3	16	31	21	23	477	81	25	39	19	16	e26	e32
4	16	29	21	22	190	71	24	36	19	15	e23	e25
5	16	28	23	21	119	62	23	34	18	14	e21	e25
6	16	27	24	22	104	58	23	32	18	14	e26	e23
7	16	26	22	23	94	55	22	31	18	15	e21	e22
8	16	26	22	21	76	52	22	30	18	22	e20	e22
9	16	25	21	23	63	51	21	29	18	17	e19	e21
10	16	25	22	22	62	48	21	28	18	16	e18	e21
11	16	25	21	22	62	45	21	26	18	16	e17	e22
12	15	25	22	23	64	43	21	26	18	15	e20	e53
13	16	25	22	20	64	41	21	25	18	14	e18	31
14	17	24	22	22	62	39	22	24	18	14	e16	28
15	17	24	22	23	64	37	23	24	18	14	e16	29
16	17	23	23	25	62	36	26	23	18	13	77	27
17	16	23	23	26	58	35	30	23	17	16	121	25
18	16	23	23	52	58	34	29	23	16	37	e23	24
19	16	23	29	40	56	32	25	23	17	149	e20	24
20	15	23	25	29	53	32	24	22	17	e33	e19	23
21	15	23	23	26	50	31	30	22	16	e24	283	28
22	16	23	22	28	47	28	41	22	15	e20	29	25
23	19	23	22	29	44	29	33	22	14	e18	27	23
24	18	23	22	32	43	29	30	21	14	e17	40	23
25	18	22	24	26	46	28	43	20	15	e16	22	23
26	17	22	23	32	51	27	63	20	17	e15	21	22
27	17	22	20	32	59	27	73	19	16	e128	88	21
28	17	22	21	30	83	27	73	19	16	e62	154	21
29	17	22	26	29	91	25	63	19	17	36	47	21
30	38	22	24	29	---	26	51	19	17	43	285	21
31	47	---	23	30	---	26	---	19	---	108	426	---
TOTAL	561	1152	704	826	2396	1336	975	808	516	969	2002	875
MEAN	18.1	38.4	22.7	26.6	82.6	43.1	32.5	26.1	17.2	31.3	64.6	29.2
MAX	47	431	29	52	477	91	73	45	19	149	426	124
MIN	15	22	20	20	38	25	21	19	14	13	16	21
AC-FT	1110	2280	1400	1640	4750	2650	1930	1600	1020	1920	3970	1740

CAL YR 1987 TOTAL 11016 MEAN 30.2 MAX 431 MIN 15 AC-FT 21850
WTR YR 1988 TOTAL 13119 MEAN 35.8 MAX 477 MIN 13 AC-FT 26020

e Estimated

09497980 CHERRY CREEK NEAR GLOBE, AZ

LOCATION.--Lat 33°49'40", long 110°51'20", in SW¼ sec.30, T.6 N., R.15 E. (unsurveyed), Gila County, Hydrologic Unit 15060103, in Tonto National Forest, on right bank 0.2 mi upstream from Devils Chasm, 13 mi upstream from mouth, and 30 mi north of Globe.

DRAINAGE AREA.--200 mi^2.

PERIOD OF RECORD.--May 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 17, 1979, at site 125 ft downstream at datum 2.95 ft lower.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--23 years, 40.8 ft^3/s, 29,560 acre-ft/yr; median of yearly mean discharges, 23 ft^3/s, 16,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft^3/s Jan. 17, 1979, gage height, unknown, from slope-area measurement of peak flow; minimum daily, 2.4 ft^3/s Sept. 17, 22, 25, 29, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 750 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 3	1100	1,810	6.85	Aug. 30	0245	2,160	7.27
Aug. 27	1900	2,870	7.97	Aug. 31	1900	*5,170	*9.77

Minimum daily discharge, 5.5 ft^3/s Oct. 3, 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	86	7.9	11	66	18	9.5	19	8.2	7.3	13	343
2	5.7	66	7.9	11	82	19	9.5	17	8.3	7.5	9.5	116
3	5.5	27	7.9	10	955	19	9.7	16	8.0	7.0	14	56
4	5.6	17	7.9	10	298	19	9.1	15	7.6	6.8	59	37
5	5.6	13	9.4	12	149	19	9.0	14	7.4	6.7	37	29
6	5.6	11	8.5	70	93	18	8.8	13	7.2	6.8	20	23
7	5.6	9.9	7.9	40	69	17	8.9	13	7.3	6.9	27	20
8	5.5	9.0	7.9	25	55	16	8.9	13	7.3	7.1	12	17
9	5.7	8.2	7.9	20	48	15	8.7	12	7.2	7.2	9.7	15
10	5.7	7.9	7.9	18	45	15	8.7	12	7.2	6.8	9.1	13
11	5.7	7.9	7.9	16	42	15	8.7	11	7.2	9.7	8.9	13
12	5.8	7.8	7.9	16	38	14	8.6	11	6.9	6.8	8.6	13
13	6.1	7.5	8.9	14	35	14	8.5	10	7.1	6.4	8.4	11
14	6.2	8.8	8.8	14	32	13	8.8	9.9	7.0	6.4	8.2	9.5
15	5.9	14	8.0	13	30	13	9.6	9.6	6.9	6.2	8.8	8.9
16	5.9	11	7.9	15	28	13	12	9.4	7.0	6.2	8.6	8.3
17	5.9	9.4	11	49	26	12	13	9.5	6.8	7.2	8.5	7.8
18	5.9	8.9	15	256	24	12	14	9.5	7.2	7.5	9.2	7.4
19	5.9	8.5	16	100	23	12	12	9.2	8.0	7.2	8.9	7.2
20	5.8	8.1	22	57	21	12	14	8.9	8.7	6.7	8.4	7.2
21	5.9	7.9	16	47	20	11	20	8.9	7.4	6.7	19	11
22	5.9	7.9	13	44	20	11	75	8.8	6.8	6.5	19	16
23	7.0	7.9	13	42	19	11	146	8.7	6.5	6.5	19	10
24	5.6	7.3	13	51	18	11	137	8.4	6.8	6.4	30	8.5
25	6.1	7.9	13	45	18	10	96	8.3	7.1	6.6	12	7.5
26	5.9	7.8	12	44	18	10	54	8.1	7.0	6.6	13	7.2
27	5.9	7.9	11	58	20	9.9	38	8.3	7.2	13	339	7.1
28	5.9	7.9	10	72	19	10	30	8.1	7.2	25	301	6.9
29	6.2	7.9	11	88	18	9.8	25	8.0	7.1	20	118	6.8
30	6.9	7.9	11	107	---	9.5	21	8.1	7.4	11	612	6.8
31	10	---	11	90	---	9.5	---	8.3	---	10	846	---
TOTAL	187.7	425.8	328.5	1465	2329	417.7	842.0	334.0	219.0	258.7	2624.8	850.1
MEAN	6.05	14.2	10.6	47.3	80.3	13.5	28.1	10.8	7.30	8.35	84.7	28.3
MAX	10	86	22	256	955	19	146	19	8.7	25	846	343
MIN	5.5	7.5	7.9	10	18	9.5	8.5	8.0	6.5	6.2	8.2	6.8
AC-FT	372	845	652	2910	4620	829	1670	662	434	513	5210	1690

CAL YR 1987 TOTAL 6373.1 MEAN 17.5 MAX 286 MIN 4.9 AC-FT 12640

WTR YR 1988 TOTAL 10282.3 MEAN 28.1 MAX 955 MIN 5.5 AC-FT 20390

09498400 PINAL CREEK AT INSPIRATION DAM NEAR GLOBE, AZ

LOCATION.--Lat 33°34'23", long 110°54'02", in NE¼NW¼SE¼ sec.26, T.3 N., R.14 E., Gila County, Hydrologic Unit 15060103, in Tonto National Forest, on right bank 20 ft upstream from Inspiration Dam, 3.8 mi upstream from mouth, and 14 mi northwest of the town of Globe.

DRAINAGE AREA.--195 mi², of which about 33 mi² is partly or entirely noncontributing due to mining operations (1988).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,740 ft (revised) above National Geodetic Vertical Datum of 1929, from topographic map.

AVERAGE DISCHARGE.--8 years (water years 1981-88), 11.7 ft³/s, 8,480 acre-ft/yr.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,920 ft³/s July 9, 1981 (from weather records), gage height, 5.05 ft, from high-water mark; minimum daily, 0.99 ft³/s Aug. 13, 1988.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Jan. 18	1200	331	1.99	Aug. 2	2015	287	1.89
July 9	2015	*547	*2.39	Aug. 21	0130	217	1.71
July 28	2055	291	1.90				

Minimum daily discharge, 0.99 ft³/s Aug. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	12	6.1	9.2	7.4	5.3	7.4	7.4	5.1	5.6	23	12
2	7.4	6.5	5.8	9.2	7.4	6.0	7.4	5.9	4.8	5.1	31	9.4
3	7.4	5.1	6.0	8.4	8.9	5.1	6.7	6.1	5.2	5.1	12	7.5
4	7.4	5.1	6.7	8.2	8.6	5.5	6.6	6.9	5.3	5.1	18	7.0
5	7.6	5.1	8.0	8.2	9.1	6.8	6.6	6.6	5.8	5.7	8.6	6.8
6	7.1	5.1	6.6	8.2	8.2	5.6	6.6	6.6	5.7	5.6	5.3	4.1
7	6.6	5.4	6.6	7.7	8.2	6.9	7.6	6.6	5.3	5.0	4.8	3.2
8	6.6	5.4	6.6	7.4	8.6	7.4	8.2	6.6	5.4	4.7	3.8	2.4
9	6.6	5.1	6.6	7.4	8.9	6.7	8.2	7.0	5.1	29	2.4	2.5
10	6.6	5.3	6.9	7.8	8.3	6.7	8.9	7.1	5.4	8.2	1.3	3.2
11	6.4	5.1	7.0	8.2	8.0	7.0	8.3	8.0	5.2	5.3	1.4	3.9
12	5.8	5.1	6.6	8.4	7.8	5.7	8.2	8.2	5.2	2.8	1.1	3.6
13	5.8	5.1	6.6	8.7	7.4	5.5	7.9	8.2	5.1	1.5	.99	2.5
14	5.8	5.2	6.6	8.2	7.8	6.9	7.4	8.2	5.1	1.2	6.9	2.0
15	5.8	5.8	6.6	7.4	8.1	6.4	9.5	8.2	5.3	1.5	14	2.2
16	6.4	5.5	6.6	7.4	8.2	7.0	9.0	8.2	5.5	1.8	5.6	2.3
17	5.9	5.1	12	8.0	8.2	7.5	8.2	8.2	6.0	1.8	3.1	2.5
18	5.8	5.8	9.4	e124	8.2	8.9	8.1	8.2	5.4	2.4	2.4	2.5
19	5.8	5.8	7.0	e21	8.2	8.0	6.8	8.2	6.9	3.3	2.4	2.6
20	5.8	5.8	7.6	e8.7	7.8	8.5	6.6	8.2	7.2	2.6	5.2	3.5
21	6.2	6.2	6.8	e8.2	8.5	9.3	7.3	8.2	6.6	3.9	50	6.8
22	6.6	6.6	7.9	e8.2	8.9	9.8	7.3	8.2	7.1	3.4	9.2	5.6
23	7.5	6.1	9.2	e26	9.9	10	6.6	8.2	7.1	3.4	11	5.7
24	7.3	5.2	9.2	e48	8.8	10	5.9	8.2	7.4	3.6	11	6.0
25	6.6	6.1	9.2	e10	8.7	9.9	5.8	8.2	7.1	4.0	8.5	5.8
26	5.7	5.6	8.2	e9.3	8.3	8.5	6.3	7.7	6.6	10	6.4	6.4
27	5.3	5.8	8.2	e9.2	6.8	9.2	6.9	5.1	7.1	10	9.7	6.6
28	8.0	5.8	9.2	e8.8	6.6	9.1	7.4	5.1	6.6	34	7.4	6.3
29	7.4	5.8	10	8.0	5.9	8.2	7.4	5.1	6.4	11	6.6	5.4
30	5.8	5.8	9.3	7.4	---	8.2	6.9	5.1	5.8	2.7	6.3	5.8
31	6.4	---	8.9	7.4	---	7.6	---	5.1	---	6.8	9.4	---
TOTAL	201.7	173.2	238.0	442.2	234.1	233.4	221.0	222.8	178.8	196.1	288.79	146.0
MEAN	6.51	5.77	7.68	14.3	8.07	7.53	7.37	7.19	5.96	6.33	9.32	4.87
MAX	8.0	12	12	124	9.1	10	9.0	8.2	7.4	34	50	12
MIN	5.3	5.1	5.8	7.4	5.9	5.1	5.8	5.1	4.8	1.2	.99	2.0
AC-FT	400	344	472	877	464	463	438	442	355	389	573	290

CAL YR 1987 TOTAL 2722.3 MEAN 7.46 MAX 55 MIN 2.7 AC-FT 5400
WTR YR 1988 TOTAL 2776.09 MEAN 7.58 MAX 124 MIN .99 AC-FT 5510

e Estimated

09498400 PINAL CREEK AT INSPIRATION DAM NEAR GLOBE, AZ--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--November 1979 to current year.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER ATURE AIR (DEG C) (00020)	TEMPER ATURE WATER (DEG C) (00010)	TUR BID ITY (NTU) (00076)	BARO-METRIC PRES SURE (MM OF HG) (00025)	OXYGEN, DIS SOLVED (MG/L) (00300)	OXYGEN, DIS SOLVED (PER-CENT SATUR ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1987											
22...	1200	6.9	3290	8.07	26.0	21.0	0.40	690	8.2	103	36
NOV											
25...	1125	6.6	3500	8.08	16.5	14.0	0.50	687	9.1	93	60
DEC											
31...	1220	8.8	3370	8.18	10.0	14.0	0.90	695	9.1	98	*110
JAN 1988											
29...	1245	8.2	3320	7.80	15.0	18.0	3.6	690	7.8	92	59
FEB											
24...	1215	8.2	3320	7.72	17.0	19.5	0.50	693	7.8	95	42
MAR											
18...	1135	8.1	3410	8.02	16.5	18.0	0.40	698	8.3	97	60
APR											
29...	1030	7.4	3420	8.02	21.5	22.5	0.40	690	7.6	98	25
MAY											
26...	1135	8.1	3430	8.03	33.1	27.5	1.3	688	6.9	98	68
JUN											
28...	1405	6.9	3340	8.05	31.5	23.0	1.1	693	8.3	121	73
JUL											
20...	1500	3.7	3480	8.10	35.0	34.0	2.3	692	6.8	95	67
AUG											
26...	1040	6.4	3400	7.90	30.0	29.0	16	693	6.2	91	--
SEP											
20...	1510	5.1	3480	8.01	31.0	27.0	2.5	684	6.7	95	68

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT 1987											
22...	K5	50	2000	1900	590	140	73	0.7	3.6	138	0
NOV											
25...	K5	35	1700	1600	510	110	74	0.8	*3.5	149	0
DEC											
31...	<1	K11	1800	1700	540	120	73	0.6	*3.4	149	0
JAN 1988											
29...	K4	24	2100	2000	620	140	68	0.6	3.5	153	0
FEB											
24...	K3	K9	1900	1800	560	120	*82	0.9	4.4	155	0
MAR											
18...	K8	K18	2000	1900	580	130	*83	0.8	4.2	137	0
APR											
29...	K8	35	2000	1900	590	130	83	0.8	4.6	138	0
MAY											
26...	K13	48	2200	2100	660	140	84	0.8	4.8	124	0
JUN											
28...	K11	25	2400	2300	700	160	82	0.8	4.9	120	0
JUL											
20...	83	180	2400	2300	690	170	84	0.8	4.5	134	0
AUG											
26...	100	86	1900	1800	560	130	89	0.9	4.2	134	0
SEP											
20...	210	2500	2000	1900	580	130	*84	0.9	4.9	133	0

* Value verified.
K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09498400 PINAL CREEK AT INSPIRATION DAM NEAR GLOBE, AZ--Continued

WATER QUALITY DATA

DATE	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MC/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 1987											
22...	0	113	1800	100	0.20	3360	2800	4.57	1	<0.100	0.180
NOV											
25...	0	122	*2100	*110	0.30	3410	2990	4.64	<1	<0.100	0.150
DEC											
31...	0	122	2100	110	0.20	3390	3050	4.61	6	<0.100	0.180
JAN 1988											
29...	0	127	2000	90	0.20	3380	3050	4.60	1	<0.100	0.180
FEB											
24...	0	127	2200	*110	0.20	3410	3180	4.64	4	0.200	0.070
MAR											
18...	0	112	*2200	*110	0.10	3400	3210	4.62	9	<0.100	0.160
APR											
29...	0	113	2200	100	0.20	3480	3210	4.73	8	<0.100	0.160
MAY											
26...	0	102	2200	110	0.30	3180	3290	4.32	7	<0.100	0.210
JUN											
28...	0	98	2200	110	0.30	3540	3350	4.81	10	<0.100	0.250
JUL											
20...	0	110	2200	110	0.20	3580	3360	4.87	8	0.190	0.390
AUG											
26...	0	110	*2200	*110	0.10	3520	3200	4.79	32	<0.100	0.280
SEP											
20...	0	109	2200	*110	0.20	3600	3210	4.90	3	<0.100	0.410

DATE	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)
OCT 1987											
22...	--	<0.20	--	--	0.080	0.08	<1	<1	100	70	1
NOV											
25...	0.25	0.40	--	--	<0.010	--	<1	<1	<100	70	2
DEC											
31...	0.32	0.50	--	--	0.030	0.03	<1	<1	100	60	1
JAN 1988											
29...	0.22	0.40	--	--	0.040	0.04	<1	<1	<100	50	2
FEB											
24...	0.23	0.30	0.50	2.2	0.050	0.05	1	<1	200	60	2
MAR											
18...	0.54	0.70	--	--	0.030	0.03	<1	<1	<100	60	2
APR											
29...	0.54	0.70	--	--	0.040	0.04	<1	<1	<100	70	2
MAY											
26...	0.49	0.70	--	--	0.040	0.04	1	1	<100	70	2
JUN											
28...	0.55	0.80	--	--	0.090	0.09	<1	<1	<100	60	1
JUL											
20...	0.51	0.90	1.0	4.4	0.030	0.03	<1	<1	100	70	1
AUG											
26...	0.82	1.1	--	--	0.080	0.08	2	<1	<100	70	1
SEP											
20...	0.69	1.1	--	--	0.050	0.05	1	<1	<100	70	3

* Value verified.
< Actual value is known to be less than value shown.

09498400 PINAL CREEK AT INSPIRATION DAM NEAR GLOBE, AZ--Continued

WATER QUALITY DATA

DATE	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (010	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
OCT 1987											
22...	1	<1	*4	13	6	100	20	<5	<5	--	30000
NOV											
25...	2	6	3	20	11	90	30	<5	<5	--	31000
DEC											
31...	2	6	<5	23	12	110	20	<5	<5	--	27000
JAN 1988											
29...	2	4	3	54	15	340	20	<5	<5	--	32000
FEB											
24...	3	4	4	24	10	130	40	<5	<5	--	35000
MAR											
18...	2	4	5	190	13	90	40	<5	<5	--	34000
APR											
29...	2	4	2	13	9	80	30	<5	<5		34000
MAY											
26...	2	3	3	18	7	160	30	<5	<5	150	33000
JUN											
28...	1	5	4	13	4	90	40	<5	<5	140	37000
JUL											
20...	3	3	3	20	7	260	30	<5	<5	140	41000
AUG											
26...	2	5	3	--	5	1800	30	<5	<5	140	35000
SEP											
20...	2	4	4	26	7	720	20	<5	<5	150	35000

DATE	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 1987											
22...	33000	<0.10	--	--	<1	<1	<1.0	30	20	2	0.04
NOV											
25...	28000	<0.10	--	--	<1	<1	<1.0	20	30	3	0.05
DEC											
31...	27000	<0.10	--	--	<1	<1	<1.0	<20	20	8	0.19
JAN 1988											
29...	29000	<0.10	--	--	<1	<1	<1.0	30	30	13	0.23
FEB											
24...	32000	<0.10	--	--	<1	<1	<1.0	30	30	17	0.36
MAR											
18...	29000	<0.10	--		<1	<1	1.0	30	40	8	0.18
APR											
29...	35000	<0.10	--	--	<1	<1	1.0	30	30	24	0.48
MAY											
26...	33000	<0.10	*2	200	<1	<1	<1.0	40	20	169	3.7
JUN											
28...	36000	<0.10	*1	200	<1	<1	<1.0	20	20	141	2.6
JUL											
20...	35000	<0.10	4	200	<1	<1	1.0	20	20	16	0.16
AUG											
26...	38000	0.10	3	200	<1	<1	1.0	30	20	62	1.1
SEP											
20...	36000	<0.10	3	200	<1	<1	<1.0	20	20	12	0.17

* Value verified.
< Actual value is known to be less than value shown.

09498500 SALT RIVER NEAR [illegible], AZ
(National stream-quality [illegible])

LOCATION.--Lat 33°37'10", long 110°55'15", in SE¼NE¼ sec [illegible] County, Hydrologic Unit 15060103, in Tonto National Forest [illegible] Highway 288, 0.3 mi downstream from Pinal Creek [illegible] of village of Roosevelt, and 17 mi upstream [illegible]

DRAINAGE AREA.--4,306 mi².

WATER [illegible]

PERIOD OF RECORD.--January 191[illegible] to current year [illegible] WSP 1313).

REVISED RECORDS.--WSP 1049: [illegible]

GAGE.--Water-stage recorder. Datum of gage [illegible] to 1925, nonrecording gage at diver[illegible] present site and datum 1925 to Jan. [illegible] recorder at diversion dam.

REMARKS.--No estimated daily discharges [illegible] acres above station and two trans-basin [illegible] out of basin to Willow Creek [illegible] Lake; see record elsewhere in this report.

AVERAGE DISCHARGE.--[illegible] years, [illegible] ft³/s [illegible] 522,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--[illegible] curve extended above 55,000 ft³/s [illegible] and 102,[illegible] ft³/s; maximum gage height, [illegible] day, July 1-4, [illegible] 195[illegible]

EXTREMES OUTSIDE PERIOD OF RECORD.--[illegible]

EXTREMES FOR CURRENT YEAR.--[illegible]

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 4	[illegible]	9,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Apr. 23	1515	4,[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12.65
Apr. 29	2345	5,[illegible]	[illegible]				

Minimum daily discharge, 204 ft³/s [illegible]

DISCHARGE, [illegible]

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	219	521	241	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	217	1380	272	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	756
3	212	879	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4810
4	210	755	263	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3320
5	211	669	209	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2310
6	206	576	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	206	551	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	204	596	303	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	205	722	295	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	207	536	[illegible]	461	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	209	513	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	207	470	231	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	217	436	287	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	226	414	304	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	229	416	309	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	756
16	[illegible]	442	289	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	414	264	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	536
18	251	387	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	541
19	243	371	412	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	498
20	236	357	423	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	464
21	227	341	421	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	438
22	225	351	404	495	783	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1340	464
23	271	337	362	460	744	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1670	442
24	265	334	343	478	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	415
25	274	332	345	511	831	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1800	396
26	[illegible]	325	350	502	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1280	372
27	317	317	352	529	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1240	358
28	[illegible]	303	321	657	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2260	339
29	293	284	297	898	1850	1340	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	329
30	282	279	282	1090	---	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	321
31	308	---	300	1140	---	[illegible]	---	[illegible]	---	[illegible]	3740	---
TOTAL	7497	14697	9840	17991	46092	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	43190
MEAN	242	490	317	580	1589	1125	[illegible]	[illegible]	[illegible]	[illegible]	1231	1440
MAX	318	1380	423	1230	6780	1870	[illegible]	[illegible]	[illegible]	[illegible]	3740	8330
MIN	204	279	264	332	744	662	[illegible]	[illegible]	[illegible]	241	430	321
AC-FT	14870	29150	19520	35690	91420	69190	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1987 TOTAL 334708 MEAN 917 MAX 5300 MIN 180 [illegible]
WTR YR 1988 TOTAL 322953 MEAN 882 MAX 8330 MIN 204 [illegible]

09498500 SALT RIVER NEAR ROOSEVELT, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1958 to October 1967, January 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: April 1958 to October 1967.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
OCT 1987												
21...	1200	224	3320	8.20	26.0	18.0	4.4	707	9.0	103	24	K13
NOV												
24...	1240	320	2550	8.50	14.0	9.0	2.5	707	11.0	103	14	K3
DEC												
30...	1325	273	2650	8.53	12.0	5.5	1.3	707	11.8	102	46	<1
JAN 1988												
28...	1055	580	1590	7.30	13.0	7.0	18	710	10.8	96	<10	K3
FEB												
25...	1325	785	1340	8.10	20.0	11.5	5.1	705	10.2	102	<10	<1
MAR												
17...	1200	837	1200	8.40	16.0	10.0	3.8	709	10.6	101	*110	<1
APR												
28...	1300	2640	428	8.11	24.0	16.0	24	700	8.9	98	<10	K30
MAY												
27...	1320	589	1320	8.80	35.0	24.0	1.6	698	8.4	109	12	K6
JUN												
27...	1135	247	2330	8.38	35.0	25.5	1.7	708	7.6	101	39	24
JUL												
19...	1200	1350	2740	8.32	34.0	27.5	200	702	6.6	92	28	1200
AUG												
25...	1205	1770	694	8.11	33.0	27.5	67	708	7.1	97	22	770
SEP												
19...	1140	494	1440	8.45	27.0	20.5	3.6	703	8.1	99	16	K11

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT 1987												
21...	340	350	210	87	32	520	13	13	212	0	0	174
NOV												
24...	K8	290	100	80	22	400	11	8.3	215	7	0	188
DEC												
30...	K2	330	140	91	25	410	10	9.5	216	16	0	204
JAN 1988												
28...	K19	250	82	63	22	230	6	6.2	209	0	0	171
FEB												
25...	K8	200	73	52	17	180	6	4.8	172	0	0	141
MAR												
17...	K5	170	59	46	14	170	6	4.4	134	2	0	113
APR												
28...	K48	84	14	23	6.4	50	2	1.7	79	0	0	65
MAY												
27...	K7	170	58	48	13	180	6	5.0	110	26	0	134
JUN												
27...	35	310	170	78	28	490	13	10	176	4	0	151
JUL												
19...	1500	250	98	63	23	440	12	9.3	173	7	0	153
AUG												
25...	1300	120	23	34	9.3	87	4	2.8	101	0	0	83
SEP												
19...	22	200	62	52	16	200	6	5.1	154	5	0	135

* Value verified.
K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09498500 SALT RIVER NEAR ROOSEVELT, AZ--Continued

WATER QUALITY DATA

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 1987 21...	170	780	0.20	18	1850	1700	2.52	7	<0.010	<0.100	<0.100	<0.010
NOV 24...	120	640	0.20	--	1370	1380	1.86	7	--	<0.100	--	<0.010
DEC 30...	150	630	0.30	19	1440	1450	1.96	2	<0.010	<0.100	<0.100	0.020
JAN 1988 28...	89	370	0.20	--	920	883	1.25	20	--	<0.100	--	<0.010
FEB 25...	70	230	0.20	18	728	655	0.99	8	<0.010	<0.100	<0.100	0.020
MAR 17...	61	260	0.10	--	653	626	0.89	8	--	<0.100	--	<0.010
APR 28...	29	75	0.10	18	251	246	0.34	61	<0.010	0.100	0.100	0.030
MAY 27...	61	310	0.30	--	722	687	0.98	3	--	<0.100	--	0.010
JUN 27...	120	790	0.30	18	1690	1620	2.30	11	<0.010	<0.100	<0.100	0.030
JUL 19...	88	720	0.30	--	1480	1440	2.01	618	--	0.300	--	0.020
AUG 25...	35	140	0.10	20	375	390	0.51	1440	<0.010	0.100	0.100	0.060
SEP 19...	65	340	0.20	--	790	759	1.07	8	--	<0.100	--	<0.010

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P) (00673)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)
OCT 1987 21...	0.030	--	<0.20	--	--	<0.010	<0.010	<0.010	--	--	--	<10
NOV 24...	--	--	0.20	--	--	0.010	--	--	--	0.01	--	--
DEC 30...	<0.010	0.28	0.30	--	--	0.010	0.010	<0.010	--	0.01	0.01	--
JAN 1988 28...	--	--	<0.20	--	--	0.020	--	--	--	0.02	--	--
FEB 25...	0.020	--	<0.20	--	-	0.030	0.030	0.020	0.06	0.03	0.01	30
MAR 17...	--	--	0.30	--	--	0.030	--	--	--	0.03	--	--
APR 28...	0.020	0.37	0.40	0.50	2.2	0.140	0.040	0.060	0.18	0.14	0.0	50
MAY 27...	--	0.19	0.20	--	--	0.030	--	--	--	0.03	--	--
JUN 27...	0.020	0.37	0.40	--	--	0.030	<0.010	<0.010	--	0.03	--	--
JUL 19...	--	2.7	2.7	3.0	13	0.050	--	--	--	0.05	--	--
AUG 25...	0.020	0.64	0.70	0.90	3.5	0.270	0.050	0.050	0.15	0.27	0.0	10
SEP 19...	--	--	0.20	--	--	0.060	--	--	--	0.06	--	--

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1987 21...	6	4	65	<0.5	300	<1	<1	<1	<1	<3	6
NOV 24...	5	5	100	--	210	<1	<1	2	<1	--	6
DEC 30...	5	5	<100	--	220	1	<1	3	<1	--	5
JAN 1988 28...	4	3	38	--	120	1	<1	2	<1	--	6
FEB 25...	3	3	34	<0.5	100	<1	<1	1	1	<3	4
MAR 17...	3	3	28	--	100	<1	<1	2	2	--	6
APR 28...	2	2	17	<0.5	30	<1	<1	4	<1	<3	10
MAY 27...	3	3	29	--	110	<1	<1	1	1	--	3
JUN 27...	5	5	<100	--	260	<1	<1	2	1	--	3
JUL 19...	7	6	200	--	240	<1	2	9	1	--	23
AUG 25...	3	3	48	<0.5	60	<1	<1	29	<1	<3	7
SEP 19...	4	3	44	--	120	<1	<1	2	1	--	5

< Actual value is known to be less than value shown.

09498500 SALT RIVER NEAR ROOSEVELT, AZ--Continued

WATER QUALITY DATA

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)
OCT 1987 21...	1	290	4	<5	<5	350	840	*810	<0.10	<0.1	<10
NOV 24...	5	180	<10	<5	<5	--	560	540	<0.10	--	--
DEC 30...	4	110	<10	<5	<5	--	950	1100	<0.10	--	--
JAN 1988 28...	4	1400	22	<5	<5	--	420	360	<0.10	--	--
FEB 25...	3	530	19	<5	<5	130	280	270	<0.10	<0.1	<10
MAR 17...	5	350	29	<5	<5	--	290	270	<0.10	--	--
APR 28...	3	2300	37	<5	<5	31	500	68	<0.10	<0.1	<10
MAY 27...	2	100	7	<5	<5	--	330	300	<0.10	--	--
JUN 27...	1	90	20	<5	<5	--	670	600	<0.10	--	--
JUL 19...	2	6800	20	18	<5	--	660	*30	0.10	--	--
AUG 25...	2	*13000	6	9	<5	58	880	14	0.10	<0.1	<10
SEP 19...	2	440	9	<5	<5	--	440	430	0.10	--	--

DATE	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 1987 21...	4	<1	<1	<1.0	990	<6	<10	7	98	27	16
NOV 24...	--	<1	<1	<1.0	--	--	<10	<10	97	20	17
DEC 30...	--	<1	<1	<1.0	--	--	<10	<10	93	6	4.4
JAN 1988 28...	--	<1	<1	<1.0	--	--	<10	<3	99	31	49
FEB 25...	3	<1	<1	<1.0	470	<6	<10	<3	96	15	32
MAR 17...	--	2	<1	<1.0	--	--	<10	<3	99	9	20
APR 28...	1	<1	<1	1.0	180	<6	70	<3	79	98	699
MAY 27...	--	2	<1	1.0	--	--	10	6	97	4	5.4
JUN 27...	--	<1	<1	<1.0	--	--	10	10	100	6	4.0
JUL 19...	--	<1	<1	1.0	--	--	50	<10	96	824	3000
AUG 25...	4	<1	<1	<1.0	260	<6	70	10	98	1760	6410
SEP 19...	--	<1	<1	<1.0	--	--	<10	3	89	11	15

* Value verified

< Actual value is known to be less than value shown.

09498503 SOUTH FORK PARKER CREEK NEAR ROOSEVELT, AZ

LOCATION.--Lat 33°47'50", long 110°57'35", in NE¼NW¼ sec.7, T.5 N., R.14 E., Gila County, Hydrologic Unit 15060103, in Tonto National Forest, 1.5 mi upstream from confluence with Pocket Creek, and 12 mi northeast of Roosevelt.

DRAINAGE AREA.--1.09 mi^2.

PERIOD OF RECORD.--November 1985 to current year. Prior to November 1985, station operated by the U.S. Forest Service (records unpublished).

GAGE.--Water-stage recorder and two sharp-crested weirs. Elevation of gage is 5,440 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60 ft^3/s, Feb. 16, 1986, gage height, 3.73 ft; no flow for many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, since 1934, 270 ft^3/s, Dec. 23, 1945 as reported by the U.S. Forest Service.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36 ft^3/s, Feb. 3, gage height, 3.23 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.19	.02	.15	1.6	.44	.07	.52	.02	.01	.00	1.8
2	.00	.78	.02	.15	2.0	.44	.07	.45	.02	.01	.00	.95
3	.00	.38	.02	.15	14	.44	.07	.41	.02	.01	.00	.50
4	.00	.27	.02	.22	3.8	.44	.07	.37	.02	.01	.00	.32
5	.00	.21	.02	.52	2.3	.44	.07	.34	.02	.00	.00	.23
6	.00	.12	.02	2.4	1.7	.37	.07	.32	.02	.00	.00	.18
7	.00	.10	.02	1.0	1.4	.37	.07	.30	.02	.00	.00	.14
8	.00	.08	.02	.52	1.3	.37	.06	.28	.02	.00	.00	.11
9	.00	.06	.02	.45	1.2	.37	.07	.26	.02	.01	.00	.08
10	.00	.05	.02	.37	1.1	.30	.05	.24	.02	.02	.00	.07
11	.00	.04	.02	.37	1.0	.22	.05	.23	.02	.02	.00	.06
12	.00	.03	.02	.37	.88	.22	.05	.22	.02	.01	.00	.06
13	.00	.03	.02	.37	.74	.22	.05	.20	.02	.01	.00	.05
14	.00	.03	.02	.30	.67	.22	.04	.19	.02	.01	.00	.05
15	.00	.03	.02	.22	.67	.22	.04	.18	.01	.01	.00	.04
16	.00	.03	.02	.30	.59	.15	.11	.17	.01	.00	.00	.04
17	.00	.03	.11	.37	.52	.15	.24	.16	.01	.00	.00	.04
18	.00	.03	.05	.88	.52	.15	.81	.16	.01	.00	.00	.04
19	.00	.03	.10	.67	.44	.15	1.2	.14	.01	.00	.00	.03
20	.00	.02	.10	.37	.37	.15	1.0	.13	.01	.00	.01	.03
21	.00	.02	.06	.57	.37	.15	1.3	.10	.01	.00	1.1	.04
22	.00	.02	.05	.67	.37	.15	3.6	.02	.01	.00	.32	.04
23	.00	.02	.06	.37	.37	.15	5.9	.02	.01	.00	.22	.04
24	.01	.02	.11	.67	.37	.15	5.0	.02	.01	.00	.17	.04
25	.01	.02	.15	.67	.30	.15	3.1	.02	.01	.00	.14	.03
26	.01	.03	.15	.67	.37	.15	2.5	.02	.01	.00	.12	.03
27	.01	.02	.15	1.6	.74	.07	1.3	.02	.01	.00	.11	.03
28	.01	.02	.15	1.7	.52	.07	.87	.02	.01	.00	.09	.01
29	.01	.02	.15	2.0	.37	.07	.71	.02	.01	.00	.06	.01
30	.01	.02	.15	3.1	---	.07	.59	.02	.01	.00	.05	.01
31	.02	---	.15	2.4	---	.07	---	.02	---	.00	.11	---
TOTAL	0.09	2.73	2.02	24.78	40.58	7.08	29.13	5.57	0.44	0.13	2.50	5.10
MEAN	.003	.091	.065	.80	1.40	.23	.97	.18	.015	.004	.081	.17
MAX	.02	.78	.15	3.1	14	.44	5.9	.52	.02	.02	1.1	1.8
MIN	.00	.02	.02	.15	.30	.07	.04	.02	.01	.00	.00	.01
AC-FT	.2	5.4	4.0	49	80	14	58	11	.9	.3	5.0	10

CAL YR 1987 TOTAL 99.78 MEAN .27 MAX 3.8 MIN .00 AC-FT 198
WTR YR 1988 TOTAL 120.15 MEAN .33 MAX 14 MIN .00 AC-FT 238

09499000 TONTO CREEK ABOVE GUN CREEK, NEAR ROOSEVELT, AZ

LOCATION.--Lat 33°58'48", long 111°18'10", in SW¼NE¼ sec.2, T.7 N., R.10 E., Gila County, Hydrologic Unit 15060105, in Tonto National Forest, on left bank 600 ft upstream from Gun Creek, 17 mi upstream from high-water line of Roosevelt Lake, and 24 mi northwest of Roosevelt.

DRAINAGE AREA.--675 mi^2.

PERIOD OF RECORD.--December 1940 to current year.

REVISED RECORDS.--WSP 1283: Drainage area. WDR AZ-80-1: 1978(M).

GAGE.--Water-stage recorder. Datum of gage is 2,523.14 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Small diversions above station for irrigation.

AVERAGE DISCHARGE.--47 years (water years 1942-88), 156 ft^3/s, 113,000 acre-ft/yr; median of yearly mean discharges, 92 ft^3/s, 66,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,400 ft^3/s Feb. 15, 1980, gage height, 17.0 ft; maximum gage height, 18.2 ft Sept. 5, 1970; no flow at times.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1330	11,000	8.35	Apr. 22	1545	4,020	7.18
Jan. 18	1015	9,590	8.10	Aug. 27	2030	12,600	8.67
Feb. 3	0900	*23,900	*11.20	Aug. 29	2245	11,200	8.40

No flow July 20, 21.

REVISIONS.--The maximum discharge for the water year 1979 is 38,700 ft^3/s, Dec. 18, 1978, gage height, 14.2 ft. The peak discharge and gage height of Jan. 17, 1979 (1100 hours) have been revised to 37,100 ft^3/s, gage height, 13.9 ft, at 0800 hours, superseding figures published in reports for 1979 and 1980.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	6580	24	36	243	139	29	121	20	13	47	738
2	8.6	2660	23	34	246	121	30	98	19	12	[illegible]	263
3	8.1	443	22	33	9580	106	31	85	18	12	[illegible]	122
4	7.8	172	22	33	1620	132	29	74	16	8.5	43	80
5	7.1	112	24	34	611	122	27	67	18	8.0	45	63
6	6.2	93	25	147	559	102	27	53	17	7.2	42	53
7	6.7	79	28	314	363	93	25	51	14	6.2	[illegible]	45
8	7.1	63	24	174	284	86	30	52	12	9.3	[illegible]	39
9	6.4	55	23	[illegible]	238	78	28	50	11	11	35	34
10	6.2	50	23	93	213	71	26	48	11	18	29	18
11	5.9	47	23	75	193	65	26	45	13	20	25	14
12	6.5	42	23	66	173	61	27	43	12	15	22	15
13	7.7	39	24	57	155	57	28	37	11	11	17	16
14	8.5	38	26	53	146	54	29	34	11	8.9	10	[illegible]
15	9.0	40	25	48	133	52	30	32	10	4.9	.71	[illegible]
16	9.8	40	23	54	118	51	39	31	11	2.4	1.9	14
17	9.8	37	25	97	112	48	48	32	11	1.8	6.0	11
18	8.7	35	32	5350	107	46	152	33	11	1.3	4.4	6.0
19	7.4	33	45	1880	94	45	106	30	17	.17	4.1	11
20	8.1	32	48	837	84	43	104	27	16	.00	4.5	13
21	8.1	32	48	520	75	42	114	26	13	.00	45	17
22	9.0	31	45	424	69	41	2300	26	12	2.1	78	32
23	11	30	43	365	66	41	1630	23	12	6.0	49	29
24	11	30	41	435	72	41	913	23	9.9	5.9	154	17
25	11	29	40	372	78	42	670	22	10	2.4	70	17
26	12	27	41	306	83	35	469	21	10	.98	117	16
27	12	25	39	416	149	34	342	21	10	113	2520	13
28	11	24	34	496	208	31	248	18	9.9	91	1490	16
29	36	23	38	546	162	30	195	22	11	88	1550	16
30	125	23	39	548	---	31	156	17	12	53	2500	15
31	76	---	38	425	---	29	---	19	---	25	1860	---
TOTAL	477.1	10964	981	14387	16442	1969	7911	1287	388.8	559.05	11075.71	1777.0
MEAN	15.4	365	31.6	464	567	63.5	264	41.5	13.0	18.0	357	59.2
MAX	125	6580	48	5350	9580	139	2300	121	20	113	2520	738
MIN	5.9	23	22	33	66	29	26	17	9.9	.00	.71	6.0
AC-FT	946	21750	1950	28540	32610	3910	15690	2550	771	1110	21970	3520

CAL YR 1987 TOTAL 33823.8 MEAN 92.7 MAX 6580 MIN 1.7 AC-FT 67090
WTR YR 1988 TOTAL 68218.66 MEAN 186 MAX 9580 MIN .00 AC-FT 135300

09510000 RESERVOIR SYSTEM ON SALT RIVER AT AND BELOW ROOSEVELT DAM, AZ

LOCATION.--This system comprises four storage reservoirs created by four separate dams on Salt River, Hydrologic Unit 15060106. Roosevelt Lake, formed by Roosevelt Dam in sec. 20, T.4 N., R.12 E. (unsurveyed), on State Highway 88; Apache Lake, formed by Horse Mesa Dam, 17 mi downstream from Roosevelt Dam; Canyon Lake, formed by Mormon Flat Dam, 27 mi downstream from Roosevelt Dam; Saguaro Lake, formed by Stewart Mountain Dam, 37 mi downstream from Roosevelt Dam. Contents given herein are combined usable contents of the four reservoirs.

DRAINAGE AREA.--6,211 mi^2, at Stewart Mountain Dam.

PERIOD OF RECORD.--April 1910 to current year. Prior to October 1934, monthend contents only, published in WSP 1313. Evaporation: April 1958 to June 1963.

REVISED RECORDS.--WSP 1283. Drainage area: WRD Ariz. 1975, 1976.

GAGES.--Roosevelt Lake, water-stage indicator in powerplant connected to long distance transmitter on lake (water-stage recorder prior to Jan. 1, 1967); Apache Lake, water-stage indicator in powerplant connected to long distance transmitter on lake since April 1943 (prior to that date, nonrecording gage or reference mark); Canyon and Saguaro Lakes, mercury column gages.

REMARKS.--Total capacity of the four reservoirs as of 1981 was 1,710,000 acre-ft, divided as follows: Roosevelt Lake, 1,337,000 acre-ft; Apache Lake, 245,000 acre-ft; Canyon Lake, 58,000 acre-ft; Saguaro Lake, 70,000 acre-ft. Dead storage negligible. Dams forming these reservoirs were built as follows: Roosevelt 1905-11; Horse Mesa 1924-27; Mormon Flat 1923-26, Stewart Mountain 1928-30. The four dams forming these reservoirs completely develop the fall in the Salt River from Roosevelt Lake to Stewart Mountain Dam. Elevation of water surface varies from 1,422.0 ft, sill of lowest outlet in Stewart Mountain Dam, to 2,136 ft, top of spillway gates in raised position on Roosevelt Dam. See 1978 to 1980 reports for dates of spill prior to 1981 water year. Records given herein represent usable contents. Water from this system is used for irrigation of Salt River Valley, power generation, municipal purposes, and recreation.

COOPERATION.--Records of daily contents furnished by Salt River Valley Water Users' Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents of system, 1,764,000 acre-ft May 22, 1941; minimum, 20,680 acre-ft Sept. 16, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum contents of system, 1,647,000 acre-ft May 12; minimum 1,369,000 acre-ft Oct. 2-9.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
OBSERVATION AT 08 00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1370000	1379000	1408000	1425000	1487000	[illegible]	1551000	1624000	1619000	1535000	1448000	1437000
2	1369000	1386000	1408000	1425000	[illegible]	[illegible]	1550000	1630000	1617000	1532000	1445000	1449000
3	1369000	1391000	1409000	1426000	[illegible]	1563000	1551000	1635000	1615000	1529000	1443000	1459000
4	1369000	1393000	1409000	1426000	[illegible]	1573000	1551000	1639000	1613000	1526000	1440000	1464000
5	1369000	1394000	1410000	1427000	1531000	1573000	1551000	1642000	1610000	1522000	1439000	1466000
6	1369000	1395000	1410000	1428000	[illegible]	[illegible]	1550000	1643000	1607000	1519000	1438000	1468000
7	1369000	1396000	1411000	1429000	1545000	[illegible]	[illegible]	1643000	1604000	1515000	1436000	1468000
8	1369000	1397000	1411000	1431000	[illegible]	[illegible]	1549000	1644000	1601000	1512000	1435000	1467000
9	1369000	1398000	1411000	1432000	[illegible]	1572000	1547000	1645000	1599000	1509000	1433000	1465000
10	1370000	1399000	1412000	1433000	1558000	1571000	1546000	1646000	1596000	1506000	1431000	1464000
11	1370000	1400000	1412000	1434000	[illegible]	[illegible]	1545000	1646000	1594000	1503000	1429000	1463000
12	1370000	1400000	1413000	1435000	[illegible]	[illegible]	1545000	1647000	1590000	1501000	1426000	1461000
13	1370000	1401000	1413000	1436000	[illegible]	[illegible]	1544000	1646000	1587000	1498000	1424000	1460000
14	1370000	1401000	1414000	1436000	[illegible]	[illegible]	1543000	1646000	1584000	1495000	1421000	1458000
15	1370000	1402000	1414000	1437000	[illegible]	[illegible]	1543000	1645000	1581000	1492000	1418000	1456000
16	1370000	1402000	1414000	[illegible]	[illegible]	1564000	1544000	1645000	1578000	1489000	1415000	1455000
17	1370000	1403000	1415000	[illegible]	[illegible]	[illegible]	1544000	1644000	1575000	1486000	1414000	1453000
18	1371000	1403000	1417000	1442000	[illegible]	[illegible]	1546000	1643000	1572000	1483000	1412000	1451000
19	1371000	1404000	1417000	[illegible]	[illegible]	1559000	1548000	1642000	1570000	1480000	1411000	1449000
20	1371000	1404000	1418000	[illegible]	[illegible]	1558000	1552000	1641000	1567000	1478000	1409000	1448000
21	1371000	1404000	1419000	[illegible]	[illegible]	1557000	1555000	1640000	1565000	1476000	1410000	1447000
22	1371000	1405000	1420000	1465000	[illegible]	[illegible]	1560000	1639000	1562000	1474000	1411000	1445000
23	1372000	1405000	1421000	1466000	[illegible]	1556000	1563000	1638000	1559000	1472000	1411000	1442000
24	1372000	1405000	1421000	1469000	[illegible]	1554000	1578000	1637000	1556000	1468000	1412000	1440000
25	1373000	1406000	1422000	1470000	1575000	1553000	1586000	1636000	1553000	1465000	1413000	1439000
26	1373000	1406000	1422000	1472000	1573000	1553000	1593000	1634000	1550000	1463000	1413000	1438000
27	1373000	1406000	1422000	1474000	1571000	1552000	1600000	1632000	1547000	1460000	1413000	1436000
28	1374000	1407000	1423000	1475000	1569000	1552000	1606000	1629000	1544000	1457000	1415000	1435000
29	1374000	1407000	1423000	1477000	1568000	1551000	1611000	1627000	1541000	1455000	1417000	1433000
30	1375000	1407000	1424000	1480000	---	1551000	1617000	1624000	1538000	1452000	1420000	1432000
31	1375000	---	1424000	1483000	---	1551000	---	1621000	---	1450000	1427000	---
MAX	1375000	1407000	1424000	1483000	1580000	1573000	1617000	1647000	1619000	1535000	1448000	1468000
MIN	1369000	1379000	1408000	1425000	1487000	1551000	1543000	1621000	1538000	1450000	1409000	1432000
(*)	+9000	+29000	+17000	+62000	+81000	-17000	+73000	-5000	-84000	-87000	-11000	-7000

CAL YR 1987 MAX 1699000 MIN 1369000 (*) -65000
WTR YR 1988 MAX 1647000 MIN 1369000 (*) +60000

* Change in contents in acre-feet (from 0800 first of month).

NOTE.--Contents at 0800 Oct. 1, 1988, 1,430,000 acre-feet. Prior to Oct. 1, 1972, contents were given at 2400.

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ

LOCATION.--Lat 33°33'10", long 111°34'33", in NW¼NW¼ sec.6, T.2 N., R.8 E. (unsurveyed), Maricopa County, Hydrologic Unit 15060106, on left bank 3.5 mi downstream from Stewart Mountain Dam and 6 mi upstream from Verde River.

DRAINAGE AREA.--6,232 mi^2, of which 21 mi^2 is below Stewart Mountain Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1930 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Stewart Mountain Dam" 1934-41.

REVISED RECORDS.--WSP 1343: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,370 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 27, 1934, at site 3.2 mi upstream at different datum. Sept. 27, 1934, to Jan. 20, 1950, at site 2.8 mi upstream at datum 1,396.33 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by four reservoirs above station. (See elsewhere in this report.) Entire flow (except during infrequent periods of extreme flooding) is diverted at Granite Reef Dam, 10 mi downstream, for irrigation in Salt River Valley and for municipal use by the city of Phoenix.

AVERAGE DISCHARGE.--58 years, 977 ft^3/s, 707,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,200 ft^3/s Feb. 15, 1980, gage height, 25.0 ft, from highwater mark inside gage well, from rating curve extended above 10,000 ft^3/s defined by known release rates from Stewart Mountain Dam and recorded gage heights, maximum daily discharge, 64,000 ft^3/s Feb. 16, 1980; no flow at times in recent years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2,340 ft^3/s Feb. 28; minimum daily, 7.9 ft^3/s Feb. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	698	26	9.4	9.1	11	2210	1150	40	1500	1750	1620	e1300
2	458	12	9.3	9.6	11	1800	972	81	1510	1820	1690	e1600
3	31	11	9.4	9.8	13	1720	789	511	1670	1950	1780	1600
4	16	11	9.5	9.8	11	1630	773	468	1770	1960	1730	1440
5	13	11	9.9	9.8	11	1620	1010	711	1780	1970	1550	1480
6	12	11	9.5	9.8	12	1530	1220	1090	1690	1940	1620	1650
7	11	10	9.1	9.5	10	1600	1360	1030	1660	1910	1560	1700
8	11	10	8.8	9.4	11	1730	1510	940	1620	1850	1740	1700
9	11	9.8	8.7	9.4	11	1790	1460	961	1720	1780	1760	1690
10	10	9.6	8.7	9.4	14	1760	1430	896	1740	1620	1770	1670
11	10	9.7	8.7	9.4	12	1800	1420	943	1730	1650	1820	e1480
12	10	9.9	8.7	9.3	12	1780	1420	1030	1690	1740	1820	e1320
13	10	9.8	8.7	9.4	11	1520	1190	1100	1720	1770	1790	1460
14	9.9	9.8	8.7	9.8	11	1490	903	1160	1810	1760	1660	1420
15	10	9.9	8.8	9.8	11	1300	829	1250	1740	1780	1730	1340
16	10	9.9	9.3	9.8	11	1250	476	1220	1710	1830	1670	1480
17	10	10	12	9.9	10	1130	478	1240	1740	1610	1850	1420
18	10	10	12	18	11	1170	571	1270	1750	1550	1790	1380
19	10	10	9.2	13	9.6	1310	354	1310	1700	1590	1770	1230
20	11	10	9.0	13	7.9	1170	623	1330	1720	1530	1720	1190
21	11	10	9.1	13	9.1	1060	566	1280	1740	1590	1540	1230
22	11	10	9.4	12	962	1190	512	1210	1740	1580	1440	1240
23	11	9.8	9.4	11	1780	1330	359	1160	1800	1760	1280	1250
24	11	9.8	9.3	12	1850	1310	26	1270	1820	1790	1330	1290
25	11	9.7	9.0	12	1860	1380	20	1320	1760	1690	1420	1200
26	10	9.4	8.8	11	1990	1430	18	1650	1780	1770	1410	1030
27	11	9.5	8.7	12	2320	1450	18	1860	1730	1750	1650	1010
28	11	9.4	9.0	11	2340	1360	17	1810	1780	1720	1560	930
29	11	9.2	8.8	12	2320	1430	38	1720	1800	1750	e1450	933
30	17	9.4	8.5	11	---	1460	29	1600	1710	1660	e1350	1080
31	12	---	8.7	11	---	1380	---	1580	---	1630	e1250	---
TOTAL	1498.9	316.6	286.1	335.0	15652.6	46090	21541	35041	51630	54050	50120	40743
MEAN	48.4	10.6	9.23	10.8	540	1487	718	1130	1721	1744	1617	1358
MAX	698	26	12	18	2340	2210	1510	1860	1820	1970	1850	1700
MIN	9.9	9.2	8.5	9.1	7.9	1060	17	40	1500	1530	1250	930
AC-FT	2970	628	567	664	31050	91420	42730	69500	102400	107200	99410	80810

CAL YR 1987 TOTAL 371894.0 MEAN 1019 MAX 2240 MIN 7.4 AC-FT 737700
WTR YR 1988 TOTAL 317304.2 MEAN 867 MAX 2340 MIN 7.9 AC-FT 629400

e Estimated

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ--Continued

WATER-QUALITY RECORDS

LOCATION.--Daily record of specific conductance and water temperature collected at Stewart Mountain Dam, 3.5 mi upstream from gaging station.

PERIOD OF RECORD.--December 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1982, March 1983 to current year.
WATER TEMPERATURES: December 1950 to September 1982, March 1983 to current year.

REMARKS.--Samples for specific conductance and water temperature collected only during periods of release from dam. No inflow between specific conductance sampling point and gaging station except during infrequent periods of heavy local rains. Unpublished daily specific conductance measurements for period December 1950 to September 1964, available from district office in Tucson, Ariz.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily observed, 2,490 microsiemens Aug. 20, 1951; minimum daily observed, 470 microsiemens Feb. 10, 1980.
WATER TEMPERATURES: Maximum daily observed, 29.0°C Aug. 24, 26, 27, 1951, Sept. 11, 12, 1969; minimum daily observed, 9.0°C Feb. 1, 1979.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily observed, 1,080 microsiemens July 9, 23-25, July 27 to Aug. 10; minimum daily observed, 960 microsiemens Oct. 2.
WATER TEMPERATURES: Maximum daily observed, 23.0°C July 30, 31, Aug. 21 to Sept. 2; minimum daily observed, 13.0°C Feb. 23-25, 28, 29, Mar. 1, 4-9, 11, 12.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1987 20...	1030	10	968	8.12	29.0	20.0	0.40	727	7.1	82	27
NOV 30...	1445	9.4	975	8.36	17.5	12.0	0.40	728	11.7	115	26
DEC 29...	1240	9.3	987	8.38	19.5	8.5	0.60	732	11.3	101	46
JAN 1988 27...	1020	13	950	8.23	18.0	12.0	1.3	733	10.8	105	<10
FEB 24...	1200	1830	950	8.38	14.0	13.0	1.5	730	12.2	121	24
MAR 23...	1055	1330	950	8.52	18.0	14.0	1.6	727	10.3	105	*110
APR 26...	1100	19	960	8.42	25.0	20.5	0.50	724	10.0	117	<10
MAY 24...	1200	1300	990	8.26	31.0	19.5	1.4	723	9.0	103	41
JUN 21...	1100	1720	1020	8.19	35.0	20.0	1.2	723	8.0	93	16
JUL 25...	1055	1730	1010	8.09	36.0	22.0	1.6	726	7.8	94	26
AUG 24...	1200	1330	1020	8.21	34.0	23.0	3.5	725	8.1	100	14
SEP 22...	1045	1240	1020	8.26	21.5	21.5	3.6	726	6.7	80	11

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
OCT 1987 20...	K6	120	180	53	48	14	120	4	4.3	155
NOV 30...	<1	K18	180	53	49	14	120	4	4.1	150
DEC 29...	<1	K5	180	55	50	14	120	4	4.3	148
JAN 1988 27...	K6	K9	180	56	50	14	120	4	4.5	148
FEB 24...	<1	K15	170	48	48	13	120	4	3.9	133
MAR 23...	<1	K9	170	48	47	13	120	4	4.5	143
APR 26...	K10	26	180	52	48	14	120	4	3.8	145
MAY 24...	K4	59	170	47	47	13	120	4	4.0	137
JUN 21...	K3	K2	170	48	47	13	130	4	3.8	127
JUL 25...	K21	--	170	48	46	13	130	5	3.9	139
AUG 24...	63	K15	180	53	47	14	140	5	3.8	144
SEP 22 ..	K7	300	170	52	48	13	130	4	3.9	149

* Value verified.
K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ--Continued

WATER QUALITY DATA

DATE	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HYDROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
OCT 1987										
20...	0	0	127	58	200	0.30	531	520	0.72	1
NOV										
30...	3	0	128	59	200	0.30	543	523	0.74	<1
DEC										
29...	5	0	130	61	190	0.40	537	517	0.73	<1
JAN 1988										
27...	0	0	121	57	200	0.30	537	522	0.73	<1
FEB										
24...	1	0	111	57	190	0.30	539	508	0.73	3
MAR										
23...	2	0	120	56	190	0.30	521	505	0.71	8
APR										
26...	1	0	120	57	190	0.30	539	509	0.73	<1
MAY										
24...	1	0	114	57	200	0.40	546	515	0.74	3
JUN										
21...	1	0	106	56	200	0.30	555	524	0.75	2
JUL										
25...	0	0	114	57	210	0.30	562	533	0.76	6
AUG										
24...	1	0	120	53	210	0.20	564	541	0.77	<1
SEP										
22...	0	0	122	55	200	0.30	558	524	0.76	3

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BORON, DISSOLVED (UG/L AS B) (01020)
OCT 1987										
20...	<0.100	0.020	--	<0.20	0.030	0.03	3	3	45	90
NOV										
30...	<0.100	<0.010	--	0.20	0.010	0.01	3	2	43	80
DEC										
29...	<0.100	<0.010	--	<0.20	0.010	0.01	3	3	42	80
JAN 1988										
27...	<0.100	<0.010	--	<0.20	0.010	0.01	2	2	43	70
FEB										
24...	<0.100	<0.010	--	0.30	0.030	0.03	3	3	52	80
MAR										
23...	<0.100	0.010	--	<0.20	0.020	0.02	3	3	51	80
APR										
26...	<0.100	0.020	0.18	0.20	0.030	0.03	3	4	50	80
MAY										
24...	<0.100	0.020	--	<0.20	0.030	0.03	4	3	51	90
JUN										
21...	<0.100	<0.010	--	0.50	0.020	0.02	2	4	54	80
JUL										
25...	<0.100	<0.010	--	0.60	0.020	0.02	3	3	56	80
AUG										
24...	<0.100	0.010	0.49	0.50	0.030	0.03	3	3	56	90
SEP										
22...	0.100	0.010	--	<0.20	0.050	0.05	4	3	54	90

< Actual value is known to be less than value shown.

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ--Continued

WATER QUALITY DATA

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT 1987 20...	1	<1	<1	<1	6	4	20	<3	<5	<5
NOV 30...	<1	<1	3	<1	5	5	110	5	<5	<5
DEC 29...	<1	<1	3	<1	4	4	40	<7	<5	<5
JAN 1988 27...	1	<1	1	1	5	4	100	7	<5	<5
FEB 24...	1	<1	1	1	10	5	200	8	<5	<5
MAR 23...	<1	<1	4	1	7	5	90	8	<5	<5
APR 26...	<1	<1	5	<1	6	5	90	8	<5	<5
MAY 24...	<1	<1	4	<1	6	4	80	8	<5	<5
JUN 21...	2	<1	<1	2	15	3	90	45	<5	<5
JUL 25...	<1	<1	<1	<1	4	2	220	9	<5	<5
AUG 24...	<1	<1	2	2	6	3	220	8	<5	<5
SEP 22...	<1	<1	<1	1	4	3	240	7	<5	<5

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1987 20...	30	19	<0.10	1	1	<1.0	<10	8	0	0.0
NOV 30...	20	13	<0.10	<1	<1	<1.0	<10	<3	3	0.08
DEC 29...	20	<1	<0.10	<1	<1	<3.0	<10	<7	2	0.05
JAN 1988 27...	20	5	<0.10	<1	<1	<1.0	<10	4	3	0.11
FEB 24...	30	3	<0.10	<1	<1	1.0	20	6	8	40
MAR 23...	10	4	<0.10	<1	<1	<1.0	*<10	4	2	7.2
APR 26...	20	10	<0.10	<1	<1	<1.0	20	<3	3	0.15
MAY 24...	20	5	<0.10	<1	<1	<1.0	<10	4	2	7.0
JUN 21...	20	7	<0.10	<1	<1	1.0	<10	9	2	9.3
JUL 25...	30	9	<0.10	<1	<1	<1.0	*<10	7	3	14
AUG 24...	30	10	0.10	<1	<1	<1.0	*<10	*31	5	18
SEP 22...	30	18	<0.10	<1	<1	<1.0	<10	8	4	13

* Value verified.
< Actual value is known to be less than value shown.

09502000 SALT RIVER BELOW STEWART MOUNTAIN DAM, AZ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	968	---	---	---	---	1020	1000	1020	1040	1060	1080	1060
2	960	---	---	---	---	972	979	1020	1040	1060	1080	1060
3	---	---	---	---	---	1000	979	1020	1040	1060	1080	1060
4	---	---	---	---	---	1020	980	1020	1040	1060	1080	1060
5	---	---	---	---	---	980	990	1020	1030	1060	1080	1060
6	---	---	---	---	---	990	982	1020	1060	1030	1080	1070
7	---	---	---	---	---	970	991	1020	1060	1060	1080	1060
8	---	---	---	---	---	980	1000	1040	1030	1060	1080	1060
9	---	---	---	---	---	990	991	1040	1060	1080	1080	1060
10	---	---	---	---	---	970	1020	1020	1060	1040	1080	1060
11	---	---	---	---	---	970	990	1040	1060	1060	1060	---
12	---	---	---	---	---	970	1020	1020	1050	1040	1060	1070
13	---	---	---	---	---	990	991	1040	1060	1060	1070	1060
14	---	---	---	---	---	990	1000	1030	1040	1060	1060	1060
15	---	---	---	---	---	1000	1020	1040	1050	1060	1060	1060
16	---	---	---	---	---	1000	1020	1040	1060	1060	1050	1060
17	---	---	---	---	---	990	1040	1040	1060	1060	1060	1070
18	---	---	---	---	---	990	1020	1040	1060	1070	1060	1060
19	---	---	---	---	---	990	1010	1040	1060	1060	1060	1060
20	---	---	---	---	---	981	1000	1040	1050	1060	1060	1060
21	---	---	---	---	---	---	1020	1040	1040	1060	1070	1060
22	---	---	---	---	---	---	1040	1060	1050	1060	1070	1060
23	---	---	---	---	1040	---	---	1060	1050	1080	1060	1060
24	---	---	---	---	1040	---	1040	1040	1060	1080	1060	1060
25	---	---	---	---	1020	---	1020	1040	1050	1080	1070	1060
26	---	---	---	---	1020	---	---	1040	1040	1060	1060	1060
27	---	---	---	---	1060	---	---	1040	1040	1080	1060	1070
28	---	---	---	---	1020	---	---	1040	1040	1080	1070	1070
29	---	---	---	---	1020	---	---	1040	1040	1080	1060	1060
30	---	---	---	---	---	---	1020	1050	1040	1080	1060	1060
31	---	---	---	---	---	1000	---	1040	---	1080	1060	---
MAX	---	---	---	---	---	---	---	1060	1060	1080	1080	---
MIN	---	---	---	---	---	---	---	1020	1030	1030	1050	---

WATER TEMPERATURE, DEGREES CELSIUS, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.0	---	---	---	---	13.0	14.0	16.0	19.0	22.0	22.0	23.0
2	21.0	---	---	---	---	14.0	14.0	16.0	19.0	22.0	22.0	23.0
3	---	---	---	---	---	14.0	15.0	16.0	19.0	22.0	22.0	22.0
4	---	---	---	---	---	13.0	15.0	16.0	19.0	21.0	22.0	22.0
5	---	---	---	---	---	13.0	15.0	16.0	20.0	21.0	22.0	22.0
6	---	---	---	---	---	13.0	15.0	16.0	20.0	21.0	22.0	22.0
7	---	---	---	---	---	13.0	16.0	15.0	20.0	21.0	22.0	22.0
8	---	---	---	---	---	13.0	16.0	16.0	20.0	21.0	22.0	22.0
9	---	---	---	---	---	13.0	16.0	16.0	20.0	21.0	22.0	22.0
10	---	---	---	---	---	---	16.0	17.0	20.0	21.0	22.0	22.0
11	---	---	---	---	---	13.0	16.0	17.0	17.0	21.0	22.0	---
12	---	---	---	---	---	13.0	15.0	17.0	17.0	21.0	22.0	22.0
13	---	---	---	---	---	14.0	15.0	17.0	17.0	21.0	22.0	22.0
14	---	---	---	---	---	14.0	15.0	17.0	17.0	21.0	22.0	22.0
15	---	---	---	---	---	14.0	15.0	17.0	18.0	21.0	22.0	22.0
16	---	---	---	---	---	15.0	15.0	17.0	18.0	21.0	22.0	22.0
17	---	---	---	---	---	15.0	15.0	17.0	20.0	21.0	22.0	22.0
18	---	---	---	---	---	14.0	15.0	17.0	20.0	21.0	21.0	22.0
19	---	---	---	---	---	14.0	15.0	17.0	20.0	21.0	21.0	22.0
20	---	---	---	---	---	14.0	15.0	17.0	20.0	21.0	22.0	22.0
21	---	---	---	---	---	---	15.0	18.0	20.0	21.0	23.0	22.0
22	---	---	---	---	---	---	16.0	19.0	20.0	21.0	23.0	22.0
23	---	---	---	---	13.0	---	---	19.0	20.0	21.0	23.0	22.0
24	---	---	---	---	13.0	---	15.0	19.0	20.0	22.0	23.0	22.0
25	---	---	---	---	13.0	---	15.0	19.0	21.0	22.0	23.0	22.0
26	---	---	---	---	14.0	---	---	19.0	21.0	22.0	23.0	22.0
27	---	---	---	---	14.0	---	---	19.0	21.0	22.0	23.0	22.0
28	---	---	---	---	13.0	---	---	19.0	21.0	22.0	23.0	22.0
29	---	---	---	---	13.0	---	---	19.0	21.0	22.0	23.0	22.0
30	---	---	---	---	---	---	16.0	19.0	21.0	23.0	23.0	22.0
31	---	---	---	---	---	14.0	---	19.0	---	23.0	23.0	---
MAX	---	---	---	---	---	---	---	19.0	21.0	23.0	23.0	---
MIN	---	---	---	---	---	---	---	15.0	17.0	21.0	21.0	---

09503700 VERDE RIVER NEAR PAULDEN, AZ

LOCATION.--Lat 34°53'40", long 112°20'32", in SW¼SE¼ sec.39, T.18 N., R.1 W., Yavapai County, Hydrologic Unit 15060202, in Prescott National Forest, on right bank 0.3 mi upstream from Verde Valley Ranch, 7 mi east of Paulden, 8 mi upstream from Hell Canyon, 8 mi downstream from Granite Creek, and 10 mi downstream from Sullivan Lake.

DRAINAGE AREA.--2,530 mi^2, approximately (includes 373 mi^2 in Aubrey Valley Playa, a closed basin).

PERIOD OF RECORD.--July 1963 to current year.

REVISED RECORDS.--WDR AZ-83-1: 1981.

GAGE.--Water-stage recorder. Elevation of gage is 4,117 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Diversions and storage above station for irrigation and municipal use.

AVERAGE DISCHARGE.--25 years, 42.2 ft^3/s, 30,570 acre-ft/yr; median of yearly mean discharges, 30 ft^3/s, 21,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,700 ft^3/s Feb. 20, 1980, gage height, 12.72 ft, from rating curve extended above 7,600 ft^3/s on basis of slope-conveyance and step-backwater analysis; maximum gage height, 12.89 ft Sept. 24, 1983; minimum daily discharge, 15 ft^3/s May 13-23, 1964.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 26	0230	*342	*2.97

Minimum daily discharge, 23 ft^3/s July 7, 13-15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	41	27	27	29	28	28	31	29	25	25	27
2	28	83	27	27	31	28	28	30	29	25	28	30
3	28	45	27	27	33	28	28	30	28	25	26	30
4	29	33	27	27	74	28	28	29	28	24	28	28
5	29	33	28	28	71	28	28	29	28	24	26	26
6	29	56	28	28	43	28	28	29	28	24	27	26
7	29	81	28	27	34	28	28	29	28	23	26	26
8	29	42	28	27	31	27	28	29	27	24	25	26
9	28	31	28	27	29	27	28	29	27	24	25	27
10	28	29	28	27	28	27	28	28	27	25	25	27
11	28	28	27	28	27	28	28	28	27	24	26	27
12	29	28	27	27	27	28	28	28	27	24	25	27
13	29	27	27	27	27	28	28	29	27	23	25	27
14	28	27	27	27	27	28	28	29	27	23	25	27
15	28	27	27	27	27	28	28	29	27	23	25	27
16	28	27	27	27	27	28	29	29	27	24	25	27
17	28	27	27	28	27	28	31	29	26	24	25	27
18	27	27	27	29	27	28	30	29	27	24	26	27
19	27	27	27	28	27	28	29	29	26	24	26	27
20	27	27	27	28	27	28	28	29	26	24	27	27
21	27	27	27	27	27	28	30	29	26	24	44	27
22	27	27	27	27	27	28	34	29	25	24	28	28
23	28	27	27	28	28	28	55	29	25	24	27	28
24	29	27	27	27	28	28	91	29	25	24	28	28
25	27	27	27	28	28	28	227	29	25	24	36	28
26	26	27	27	28	28	28	215	29	25	24	62	29
27	26	27	27	28	28	28	85	29	25	27	37	29
28	26	27	27	28	28	28	54	29	25	25	32	29
29	28	27	27	28	28	28	37	29	25	25	43	29
30	26	27	27	28	---	28	32	29	25	25	38	29
31	27	---	27	28	---	28	---	29	---	25	45	---
TOTAL	861	1016	843	853	923	865	1427	900	797	751	936	827
MEAN	27.8	33.9	27.2	27.5	31.8	27.9	47.6	29.0	26.6	24.2	30.2	27.6
MAX	29	83	28	29	74	28	227	31	29	27	62	30
MIN	26	27	27	27	27	27	28	28	25	23	25	26
AC-FT	1710	2020	1670	1690	1830	1720	2830	1790	1580	1490	1860	1640

CAL YR 1987 TOTAL 10293 MEAN 28.2 MAX 83 MIN 24 AC-FT 20420
WTR YR 1988 TOTAL 10999 MEAN 30.1 MAX 227 MIN 23 AC-FT 21820

09504000 VERDE RIVER NEAR CLARKDALE, AZ

LOCATION.--Lat 34°51'08", long 112°03'55", in SE¼NW¼SE¼ sec.17, T.17 N., R.3 E., Yavapai County, Hydrologic Unit 15060202, in Prescott National Forest, on left bank 1.7 mi downstream from Sycamore Creek and 5.6 mi north of Clarkdale.

DRAINAGE AREA.--3,520 mi^2, approximately (includes 373 mi^2 in Aubrey Valley Playa, a closed basin).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1915 to October 1916, May 1917 to July 1921, April 1965 to current year.

REVISED RECORDS.--WSP 1213: 1917, 1920.

GAGE.--Water-stage recorder. Elevation of gage is 3,500 ft above National Geodetic Vertical Datum of 1929. June 1915 to June 1921 at site 2.5 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--27 years (water years 1916, 1918-20, 1966-88), 196 ft^3/s, 142,000 acre-ft/yr; median of yearly mean discharges, 157 ft^3/s, 114,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 50,600 ft^3/s Feb. 21, 1920, gage height, 19.1 ft, site and datum then in use, from rating curve extended above 2,500 ft^3/s on basis of float-area measurement at 35,000 ft^3/s; minimum daily, 55 ft^3/s Aug. 31, Sept. 1, 1920.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1145	*8,810	*9.17	Apr. 19	0245	2,610	4.63
Nov. 6	0445	4,890	6.67	Apr. 25	0130	5,040	6.79

Minimum daily discharge, 72 ft^3/s June 26.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	3380	85	88	152	588	84	125	82	76	164	223
2	75	1280	85	87	142	366	84	106	82	73	124	165
3	75	370	85	87	472	234	84	97	82	73	109	121
4	75	196	85	87	384	225	84	92	80	74	94	106
5	75	e130	89	88	267	177	84	89	79	73	98	87
6	75	2490	88	93	191	159	83	87	78	74	105	89
7	75	1020	87	92	172	146	83	87	79	73	94	90
8	75	404	87	90	178	133	84	87	79	76	87	91
9	76	225	87	89	259	114	83	86	e79	77	83	90
10	75	e155	87	89	333	e101	83	85	e77	78	81	91
11	76	e117	87	89	344	e97	83	84	75	79	81	90
12	77	e99	87	88	301	e93	83	83	75	76	83	88
13	82	e93	87	88	292	e91	84	83	76	73	81	88
14	83	e91	86	87	290	e89	87	83	75	73	81	88
15	82	e91	85	87	254	e87	91	82	74	73	81	88
16	80	e87	85	90	231	e87	95	83	74	73	81	88
17	80	e85	88	93	239	e85	353	83	74	73	81	88
18	80	e85	94	102	200	e85	986	83	75	167	81	88
19	79	85	90	96	156	e85	1330	82	77	123	82	88
20	79	86	91	93	129	e83	524	82	75	101	83	88
21	79	87	88	91	116	e83	303	82	75	90	180	87
22	79	86	87	91	117	e83	1750	82	74	86	152	88
23	82	85	89	91	163	e83	2350	82	73	84	137	87
24	89	85	91	91	215	e83	2830	80	73	83	135	86
25	89	85	91	91	248	e83	3020	79	73	86	130	86
26	85	85	90	90	290	e83	1910	80	72	e85	223	86
27	83	85	89	91	611	e83	765	79	73	80	139	86
28	83	85	89	90	1240	e83	400	79	78	83	187	86
29	99	85	89	97	907	e83	245	80	80	83	167	85
30	98	85	89	114	---	e83	161	81	80	112	133	85
31	92	---	89	154	---	83	---	82	---	171	336	---
TOTAL	2507	11422	2726	2894	8893	4118	18286	2655	2298	2701	3823	2897
MEAN	80.9	381	87.9	93.4	307	133	610	85.6	76.6	87.1	123	96.6
MAX	99	3380	94	154	1240	588	3020	125	82	171	336	223
MIN	75	85	85	87	116	83	83	79	72	73	81	85
AC-FT	4970	22660	5410	5740	17640	8170	36270	5270	4560	5360	7580	5750

CAL YR 1987 TOTAL 53177 MEAN 146 MAX 3380 MIN 71 AC-FT 105500
WTR YR 1988 TOTAL 65220 MEAN 178 MAX 3380 MIN 72 AC-FT 129400

e Estimated

09504000 VERDE RIVER NEAR CLARKDALE, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1976 to October 1979, January 1980 to August 1983, October 1986 to current year.

WATER QUALITY DATA

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE AIR (DEG C) (00020)	TEMPER- ATURE WATER (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	OXYGEN DEMAND, CHEM- ICAL (HIGh LEVEL) (MG/L) (00340)
OCT 1987 29...	1000	91	482	8.34	19.0	17.5	2.0	680	8.8	103	290
NOV 25...	0915	83	495	8.24	7.5	10.0	0.80	675	10.1	101	40
DEC 23...	1215	87	525	8.31	10.0	11.5	0.60	671	--	>100	19
JAN 1988 26...	1015	89	525	8.18	13.0	8.0	0.80	686	10.9	102	<10
FEB 25...	1045	296	268	8.11	15.5	9.0	13	682	10.4	101	25
MAR 30...	1100	85	488	8.25	16.5	15.0	0.60	670	10.1	114	100
APR 30. .	1030	163	361	8.10	21.0	17.5	18	676	8.5	101	<10
MAY 25...	1015	79	505	8.18	29.0	20.0	0.90	678	8.8	109	140
JUN 28...	1015	79	480	8.09	21.0	19.0	1.9	679	--	>100	13
JUL 26...	1000	83	510	8.07	33.5	22.0	82	680	8.3	107	16
AUG 24...	1040	99	390	7.96	24.5	21.5	550	675	7.1	91	22
SEP 29...	1245	85	483	8.28	26.0	20.0	7.1	674	9.6	120	--

DATE	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACC3 (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	SODIUM AD- SORP- TION RATIO (00P31)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935;	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)
OCT 1987 29...	59	240	230	0	52	24	25	0.7	2.1	298	257
NOV 25...	30	190	250	0	58	25	25	0.7	2.1	304	265
DEC 23...	K3	K24	250	0	58	25	26	0 7	2.2	308	269
JAN 1988 26...	K7	K10	250	0	58	25	27	0.8	2.5	327	269
FEB 25..	K3	68	130	0	31	12	10	0.4	1.2	166	136
MAR 30...	K5	380	240	0	53	25	25	0.7	1.9	323	262
APR 30...	K17	270	170	0	41	16	15	0.5	2.5	<240	<188
MAY 25...	K4	110	230	0	51	25	25	0.7	1.8	320	256
JUN 28...	77	160	190	0	47	18	28	0.9	1.3	317	255
JUL 26...	140	380	220	0	51	23	23	0.7	2.2	304	248
AUG 24...	1700	6200	170	0	44	14	11	0.4	2.3	220	181
SEP 29...	31	140	230	0	51	25	25	0.7	2.0	293	255

X Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09504000 VERDE RIVER NEAR CLARKDALE, AZ--Continued

WATER QUALITY DATA

DATE	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 1987 29...	10	261	9.1	14	0.30	268	281	0.36	12	0.200	0.010
NOV 25...	11	267	9.3	15	0.30	332	294	0.45	1	0.300	<0.010
DEC 23...	13	274	9.6	12	0.30	287	295	0.39	2	0.600	0.010
JAN 1988 26...	0	268	10	13	0.30	293	297	0.40	<1	0.200	<0.010
FEB 25...	0	136	14	5.8	0.20	181	156	0.25	6	<0.100	0.020
MAR 30...	0	265	12	12	0.20	276	287	0.38	<1	<0.100	<0.010
APR 30...	0	<197	9.0	7.9	0.20	217	201	0.30	32	0.200	0.030
MAY 25...	0	262	8.9	13	0.30	257	279	0.35	<1	<0.100	<0.010
JUN 28...	0	260	9.1	12	0.10	314	269	0.43	10	<0.100	0.080
JUL 26...	0	249	8.4	11	0.20	277	268	0.38	136	0.200	0.030
AUG 24...	0	180	7.0	7.2	0.10	209	195	0.28	359	0.300	0.020
SEP 29...	8	254	8.7	13	0.20	252	278	0.34	31	<0.100	<0.010

DATE	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)
OCT 1987 29...	0.19	0.20	0.40	1.8	0.010	0.01	18	20	180	170	<1
NOV 25...	--	<0.20	--	--	<0.010	--	16	17	170	170	1
DEC 23...	0.39	0.40	1.0	4.4	0.010	0.01	18	17	170	170	1
JAN 1988 26...	--	<0.20	--	--	0.020	0.02	16	16	180	150	<1
FEB 25...	--	<0.20	--	--	0.050	0.05	6	5	76	60	2
MAR 30...	--	0.20	--	--	<0.010	--	17	17	170	170	--
APR 30...	0.17	0.20	0.40	1.8	0.080	0.09	11	12	110	100	<1
MAY 25...	--	1.8	--	--	0.010	0.01	19	19	170	170	<1
JUN 28...	0.32	0.40	--	--	0.010	0.01	19	17	26	160	<1
JUL 26...	--	<0.20	--	--	0.040	0.04	18	17	160	140	<1
AUG 24...	1.1	1.1	1.4	6.2	1.60	1.6	8	11	49	90	3
SEP 29...	--	0.40	--	--	0.030	0.03	16	15	180	170	<1

< Actual value is known to be less than value shown.

09504000 VERDE RIVER NEAR CLARKDALE, AZ--Continued

WATER QUALITY DATA

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
OCT 1987										
29...	<1	3	2	5	<1	260	13	<5	<5	10
NOV										
25...	<1	3	3	4	2	60	11	<5	<5	10
DEC										
23...	<1	3	3	3	4	40	9	<5	<5	<10
JAN 1988										
26...	<1	3	2	2	2	90	32	10	<5	<10
FEB										
25...	<1	2	1	9	<1	780	82	<5	<5	10
MAR										
30...	<1	--	2	--	1	--	10	--	<5	--
APR										
30...	<1	2	2	6	2	2500	77	<5	<5	30
MAY										
25...	<1	2	5	2	<1	90	8	<5	<5	10
JUN										
28...	<1	3	3	3	2	180	26	<5	<5	20
JUL										
26...	<1	5	2	11	2	2400	21	6	<5	110
AUG										
24...	1	28	3	100	7	20000	210	17	<5	720
SEP										
29...	<1	3	2	3	2	360	6	<5	<5	20

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1987										
29...	3	<0.10	<1	<1	<1.0	30	5	--	36	8.9
NOV										
25...	6	<0.10	<1	<1	1.0	10	11	--	16	3.6
DEC										
23...	3	<0.10	<1	<1	<1.0	<10	13	--	13	3.1
JAN 1988										
26...	4	<0.10	<1	<1	<1.0	<10	7	--	16	3.8
FEB										
25...	2	<0.10	<1	<1	<1.0	10	4	93	22	18
MAR										
30...	4	--	<1	<1	<1.0	--	<3	--	12	2.8
APR										
30...	5	<0.10	<1	<1	<1.0	<10	3	--	34	15
MAY										
25...	4	<0.10	<1	<1	<1.0	<10	<3	--	3	0.73
JUN										
28...	7	<0.10	<1	<1	<1.0	<10	7	--	33	7.1
JUL										
26...	6	<0.10	<1	<1	<1.0	20	9	--	185	41
AUG										
24...	12	0.10	<1	<1	2.0	120	10	--	1110	298
SEP										
29...	6	0.40	<1	<1	<1.0	10	7	--	21	4.9

< Actual value is known to be less than value shown.

GILA RIVER BASIN

09504430 OAK CREEK AT SEDONA, AZ

LOCATION.--Lat 34°51'42", long 111°45'40", in NE¼NE¼NE¼ sec. 18, T.17 N., R.6 E., Coconino County, Hydrologic Unit 15060202, on left bank 290 ft downstream from State Highway 179 bridge in Sedona, 28 mi southwest of Flagstaff, and 35.1 mi upstream from mouth.

DRAINAGE AREA.--233 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 4,169.20 ft above National Geodetic Vertica Datum of 1929 (Arizona Department of Transportation bench mark).

REMARKS.--No estimated daily discharges. Records good. Many diversions above and below station for irrigation

AVERAGE DISCHARGE.--7 years, 94.9 ft^3/s, 68,760 acre-ft/yr

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,700 ft^3/s Mar. 12, 1982, gage height, 15.64 ft, from outs floodmark, from rating curve extended above 5,000 ft^3/s on the basis of slope-conveyance study; minimum dail 19 ft^3/s June 12, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*)

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1230	1,790	6.59	Feb. 27	0615	1,290	6.01
Feb. 3	0200	1,010	5.62	Apr. 24	1930	*2,830	*7.56

Minimum daily discharge, 24 ft^3/s June 16, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1	29	1160	34	35	100	343	33	58	28	31	29
2	28	461	34	36	212	250	33	49	28	30	30
3	28	132	35	35	592	170	33	45	28	29	28
4	28	70	35	35	222	137	33	41	27	29	28
5	28	52	44	37	127	125	33	40	26	29	32
6	28	285	37	88	99	116	32	37	25	28	30
7	28	166	35	65	93	109	31	36	25	28	29
8	28	81	35	49	95	88	31	35	25	28	28
9	27	52	35	44	120	66	30	34	26	28	28
10	27	42	36	43	140	58	30	34	26	28	27
11	27	38	35	45	148	50	30	33	25	29	27
12	28	36	36	44	136	45	30	33	25	28	29
13	31	35	35	41	153	42	30	32	25	27	28
14	30	34	37	39	148	39	30	31	25	27	27
15	29	35	37	38	117	39	31	31	25	26	28
16	28	35	37	39	122	39	34	30	24	26	27
17	28	35	38	48	126	37	76	30	24	27	29
18	28	34	40	61	93	36	164	30	25	26	27
19	28	35	40	48	73	36	181	30	25	27	37
20	28	35	40	44	59	36	100	30	25	28	27
21	28	35	37	42	58	35	116	30	25	27	30
22	28	35	36	42	80	35	394	30	25	27	29
23	29	34	36	41	110	35	748	29	27	27	30
24	36	34	36	44	134	34	1430	29	29	26	29
25	32	33	35	46	141	35	1450	28	29	27	49
26	29	33	34	51	179	35	935	27	29	28	35
27	29	33	34	78	911	34	471	27	29	27	58
28	28	34	35	104	565	35	236	27	32	29	[illegible]
29	73	33	35	140	445	33	123	26	43	32	[illegible]
30	39	34	35	161	---	32	79	27	33	28	[illegible]
31	52	---	35	122	---	32	---	28	---	28	36
TOTAL	967	3191	1123	1785	5598	2236	7007	1027	813	865	1009
MEAN	31.2	106	36.2	57.6	193	72.1	234	33.1	27.1	27.9	32.5
MAX	73	1160	44	161	911	343	1450	58	43	32	66
MIN	27	33	34	35	58	32	30	26	24	26	27
AC-FT	1920	6330	2230	3540	11100	4440	13900	2040	1610	1720	2000

CAL YR 1987 TOTAL 22847 MEAN 62.6 MAX 1160 MIN 25 AC-FT 45320
WTR YR 1988 TOTAL 26427 MEAN 72.2 MAX 1450 MIN 24 AC-FT 52420

09504430 OAK CREEK AT SEDONA, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1987 to September 1988 (discontinued).

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1987												
14...	1100	30	297	8.50	19.5	15.0	660	8.8	101	40	100	2
28...	1415	28	293	8.56	30.0	16.0	662	8.7	102	K23	E140	3
NOV												
16...	1020	34	296	6.15	11.0	7.5	668	10.3	98	K17	91	<1
24...	1415	33	2[illegible]7	8.40	13.5	9.5	662	10.1	102	K9	960	<1
DEC												
01...	1130	33	--	--	6.0	8.0	661	10.4	101	K14	120	--
15...	1130	34	287	8.41	7.0	5.0	663	11.1	100	K5	57	2
23...	0830	34	290	8.32	7.0	7.0	654	10.8	104	20	260	1
JAN 1988												
08...	0850	51	215	8.11	1.5	5.0	662	10.8	97	K16	160	6
27...	1530	69	199	8.45	14.0	7.5	666	10.7	102	K7	150	1
FEB												
17...	1125	126	146	7.80	6.5	4.0	662	11.6	102	220	K6900	<1
24...	1430	130	154	8.11	15.5	7.5	664	10.6	102	55	130	6
MAR												
15...	1050	39	272	8.31	10.5	7.5	658	10.4	101	K2	3000	2
29...	1500	33	295	8.47	19.0	12.5	660	9.3	101	K2	420	<1
APR												
12...	1500	30	308	8.60	29.5	15.5	659	9.3	109	K20	150	2
29...	1515	118	154	8.10	24.0	14.0	661	9.1	102	K5	950	4
MAY												
17...	1215	31	298	8.38	26.5	16.0	658	8.8	104	K3	230	<1
24...	1445	28	291	8.50	30.0	19.0	660	8.6	108	K10	96	<1
JUN												
16...	1100	26	315	8.40	27.0	19.0	662	9.0	112	K8	250	<1
29...	1445	31	293	8.45	34.0	20.0	660	8.5	108	27	K79	<1
JUL												
14...	1345	27	310	8.50	32.5	21.0	660	6.3	108	K6	330	--
27...	1445	26	282	8.28	30.0	21.0	--	--	--	K24	80	2
28...	1415	27	--	--	--	22.0	662	7.8	103	--	--	--
AUG												
12...	1300	32	300	8.30	27.0	20.0	661	8.2	104	27	270	5
25...	1450	152	230	8.12	35.0	21.0	656	7.3	96	K12000	K19000	642
SEP												
09...	1345	27	300	8.50	29.5	19.5	654	8.3	106	34	340	9
28...	1345	27	280	8.25	24.0	16.0	656	8.4	99	K7	K28	11

E Estimated
K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09504440 OAK CREEK AT RED ROCK CROSSING NEAR SEDONA, AZ

LOCATION.--Lat 34°49'28", long 111°48'20", NE¼SW¼ sec.26, T.17 N., R.5 E., Yavapai County, Hydrologic Unit 15060202 in Coconino National Forest, at Red Rock (Baldwins) crossing, 5.0 mi downstream from Sedona and 31 mi upstream from mouth.

DRAINAGE AREA.--252 mi^2.

PERIOD OF RECORD.--October 1978 to August 1983, October 1986 to current year.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1987											
28...	1015	24	305	8.50	18.0	15.0	0.30	669	9.1	103	21
NOV											
24...	1015	27	299	8.38	15.5	8.0	0.50	670	10.4	100	35
DEC											
01...	1050	E29	--	--	10.0	7.0	--	667	10.6	100	--
22...	1315	31	273	8.31	14.5	7.0	0.50	665	10.7	101	<10
JAN 1988											
27...	1030	62	230	8.19	16.0	6.0	3.1	672	11.1	101	<10
FEB											
17...	1330	E140	--	--	13.5	8.0	--	666	10.5	102	--
24...	1045	143	158	8.14	13.5	6.5	9.7	671	11.1	103	24
MAR											
29...	1100	26	289	8.22	15.5	11.5	0.40	668	9.6	101	96
APR											
29...	1015	134	150	8.10	21.0	12.0	19	668	10.6	112	16
MAY											
24...	1015	23	299	8.30	27.5	18.5	0.50	667	8.8	108	15
JUN											
29...	1045	20	305	8.33	30.0	20.0	0.30	665	9.8	124	10
JUL											
27...	1015	19	292	8.30	33.0	22.5	0.50	--	--	--	17
28...	1330	--	--	--	--	27.0	--	666	7.9	114	--
AUG											
25...	1045	21	294	8.29	29.5	23.5	3.5	663	7.7	105	<10
SEP											
09...	0900	21	295	8.30	26.0	19.0	2.3	661	8.0	100	<10
28...	1015	19	288	8.29	21.0	15.0	2.1	665	8.8	100	34

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
OCT 1987										
28...	31	150	160	0	36	18	5.1	0.2	1.0	193
NOV										
24...	K11	88	160	0	36	18	4.9	0.2	1.0	234
DEC										
01...	K5	93	--	--	--	--	--	--	--	--
22...	K4	27	160	0	36	18	5.0	0.2	0.90	189
JAN 1988										
27...	--	--	120	0	27	13	4.1	0.2	1.0	153
FEB										
17...	K4	39	--	--	--	--	--	--	--	--
24...	K6	120	84	0	19	8.9	3.0	0.1	0.80	106
MAR										
29...	K2	130	160	0	34	17	5.2	0.2	1.1	189
APR										
29...	K6	580	75	0	17	8.0	2.7	0.1	1.0	98
MAY										
24...	K8	220	160	0	36	18	5.3	0.2	0.90	181
JUN										
29...	120	1000	170	0	35	19	9.2	0.3	1.1	167
JUL										
27...	18	84	160	0	34	18	5.3	0.2	1.0	183
28...	--	--	--	--	--	--	--	--	--	--
AUG										
25...	11000	8200	160	0	34	18	5.0	0.2	0.90	189
SEP										
09...	42	E450	160	0	35	18	5.2	0.2	0.90	206
28...	27	88	170	1	35	19	5.2	0.2	1.0	194

E Estimated
K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09504440 OAK CREEK AT RED ROCK CROSSING NEAR SEDONA, AZ--Continued

WATER QUALITY DATA

DATE	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	CAR- BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA- LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)
OCT 1987 28...	167	6	168	2.1	4.6	0.10	173	167	0.24	5
NOV 24...	199	6	202	2.8	5.1	0.20	168	188	0.23	1
DEC 01...	--	--	--	--	--	--	--	--	--	--
22...	164	6	165	2.5	3.2	0.20	176	164	0.24	2
JAN 1988 27...	124	0	125	4.1	3.3	0.20	138	127	0.19	<1
FEB 17...	--	--	--	--	--	--	--	--	--	--
24...	87	0	87	7.3	2.1	0.10	107	94	0.15	5
MAR 29...	161	5	163	2.6	3.1	0.10	166	160	0.23	<1
APR 29...	78	0	80	7.4	1.7	0.10	104	85	0.14	10
MAY 24...	169	12	168	2.6	3.4	0.20	170	168	0.23	7
JUN 29...	168	18	167	2.5	3.3	0.20	178	171	0.24	3
JUL 27...	163	8	164	2.2	3.2	0.10	162	162	0.22	4
28...	--	--	--	--	--	--	--	--	--	--
AUG 25...	163	6	165	2.0	3.2	0.10	172	161	0.23	14
SEP 09...	166	0	169	9.8	3.2	0.10	168	172	0.23	11
28...	165	6	169	1.9	3.3	0.10	167	165	0.23	9

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BORON, DIS- SOLVED (UG/L AS B) (01020)
OCT 1987 28...	<0.100	<0.010	--	<0.20	0.010	0.01	5	6	210	10
NOV 24...	<0.100	0.020	--	<0.20	0.010	0.01	4	4	190	10
DEC 01...	--	--	--	--	--	--	--	--	--	--
22...	<0.100	0.020	--	<0.20	0.010	0.01	4	4	190	20
JAN 1988 27...	<0.100	<0.010	--	<0.20	0.010	0.01	3	3	150	10
FEB 17...	--	--	--	--	--	--	--	--	--	--
24...	<0.100	0.020	0.28	0.30	0.060	0.06	2	2	89	10
MAR 29...	<0.100	<0.010	--	0.20	0.010	0.01	4	4	180	10
APR 29...	<0.100	0.020	--	<0.20	0.070	0.07	2	2	71	<10
MAY 24...	<0.100	0.010	0.79	0.80	0.020	0.02	5	5	190	10
JUN 29...	<0.100	0.050	0.25	0.30	0.010	0.01	5	4	32	10
JUL 27...	<0.100	<0.010	--	<0.20	0.020	0.02	6	4	210	<10
28...	--	--	--	--	--	--	--	--	--	--
AUG 25...	<0.100	0.020	0.28	0.30	0.020	0.02	5	5	190	20
SEP 09...	<0.100	<0.010	--	<0.20	0.020	0.02	6	6	200	20
28...	<0.100	<0.010	--	0.30	0.020	0.02	5	4	210	10

< Actual value is known to be less than value shown.

09504440 OAK CREEK AT RED ROCK CROSSING NEAR SEDONA, AZ--Continued

WATER QUALITY DATA

DATE	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT 1987										
28...	<1	<1	1	<1	2	1	120	30	<5	<5
NOV										
24...	>1	<1	3	3	5	2	80	57	<5	<5
DEC										
01...	--	--	--	--	--	--	--	--	--	--
22...	1	<1	2	1	2	2	50	47	<5	<5
JAN 1988										
27...	<1	<1	4	2	<1	<1	290	51	11	<5
FEB										
17...	--	--	--	--	--	--	--	--	--	--
24...	2	<1	2	1	5	4	800	81	<5	<5
MAR										
29...	--	<1	--	2	--	1	--	22	--	<5
APR										
29...	1	<1	2	2	7	2	1400	180	<5	<5
MAY										
24...	<1	<1	2	2	3	1	100	12	<5	<5
JUN										
29...	<1	<1	3	2	2	1	90	13	<5	<5
JUL										
27...	<1	<1	<1	2	3	1	120	19	<5	<5
28...	--	--	--	--	--	--	--	--	--	--
AUG										
25...	1	<1	1	2	6	3	180	26	<5	<5
SEP										
09...	2	1	1	<1	2	<1	180	14	<5	<5
28...	<1	<1	2	2	2	2	170	38	<5	<5

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1987										
28...	10	9	<0.10	<1	<1	<1.0	<10	30	5	0.31
NOV										
24...	10	12	<0.10	<1	5	1.0	<10	17	1	0.08
DEC										
01...	--	--	--	--	--	--	--	--	--	--
22...	<10	6	<0.10	<1	<1	<1.0	<10	8	2	0.15
JAN 1988										
27...	10	4	<0.10	<1	<1	<1.0	<10	7	5	0.90
FEB										
17...	--	--	--	--	--	--	--	--	--	--
24...	<10	3	<0.10	<1	<1	1.0	10	3	9	3.6
MAR										
29...	--	4	--	<1	<1	<1.0	--	6	1	0.09
APR										
29...	20	6	<0.10	<1	<1	<1.0	<10	7	12	4.4
MAY										
24...	10	4	<0.10	<1	<1	<1.0	10	4	1	0.08
JUN										
29...	20	<1	<0.10	<1	<1	<1.0	20	10	E2	--
JUL										
27...	30	6	<0.10	<1	<1	<1.0	<10	5	4	0.22
28...	--	--	--	--	--	--	--	--	--	--
AUG										
25...	20	8	<0.10	<1	<1	<1.0	10	<3	E17	--
SEP										
09...	30	14	<0.10	<1	<1	<1.0	<10	10	21	1.2
28...	30	13	<0.10	<1	<1	<1.0	30	6	7	0.34

< Actual value is known to be less than value shown.

09504500 OAK CREEK NEAR CORNVILLE, AZ

LOCATION.--Lat 34°45'52", long 111°53'25", in NW¼SW¼ sec.23, T.16 N., R.4 E., Yavapai County, Hydrologic Unit 15060202, on right bank 250 ft downstream from county highway bridge, 0.2 mi upstream from Page Springs, 4 mi northeast of Cornville, and 15 mi upstream from mouth.

DRAINAGE AREA.--357 mi^2.

PERIOD OF RECORD.--July 1940 to September 1945, April 1948 to current year.

REVISED RECORDS.--WSP 1149: 1948(M). WRD Ariz. 1974: 1973.

GAGE.--Water-stage recorder and crest stage gage. Elevation of gage is 3,470 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to March 10, 1981, at site 250 ft upstream at same datum.

REMARKS.--Records good. Numerous diversions above and below station for irrigation.

AVERAGE DISCHARGE.--45 years, 90.1 ft^3/s, 65,280 acre-ft/yr; median of yearly mean discharges, 76 ft^3/s, 55,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft^3/s Feb. 19, 1980, gage height, 16.30 ft; maximum gage height, 16.48 ft, Sept. 5, 1970; minimum discharge, 6 ft^3/s July 27, 1940.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, 23 ft in March 1938, from floodmarks (upstream side of bridge).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1200	*7,640	*10.38	Apr. 24	2245	2,580	6.64
Feb. 3	0500	1,650	5.73				

Minimum daily discharge, 15 ft^3/s Aug. 10, 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	3220	48	39	101	386	31	64	24	24	28	e30
2	22	838	46	39	92	303	30	53	22	22	28	27
3	22	221	44	40	939	235	28	46	21	21	26	24
4	22	103	44	40	305	182	28	40	21	19	24	23
5	23	62	52	41	166	164	29	36	20	18	26	22
6	23	217	45	55	109	152	28	35	19	18	60	23
7	23	230	42	77	88	140	27	33	19	17	25	20
8	22	115	41	58	86	114	26	31	20	18	19	20
9	22	81	41	50	100	84	26	31	19	19	19	19
10	22	63	40	46	126	75	25	30	20	21	15	19
11	22	55	40	47	140	67	26	27	19	22	15	20
12	23	51	39	47	129	61	25	25	17	23	16	20
13	26	49	42	44	143	55	23	24	18	21	17	20
14	29	49	41	43	143	51	23	23	19	20	17	20
15	28	49	43	40	117	48	25	24	18	19	17	19
16	26	45	43	42	109	46	29	23	18	19	18	20
17	25	49	41	43	115	45	56	23	17	16	17	20
18	25	48	45	78	96	43	66	24	18	19	19	19
19	25	48	42	65	78	41	213	23	19	20	19	18
20	25	50	51	50	66	41	100	23	20	21	30	19
21	25	49	42	47	60	37	105	23	19	22	28	19
22	26	47	41	45	67	35	496	23	18	20	29	20
23	28	45	40	44	87	34	641	22	17	21	24	21
24	32	43	40	44	122	34	1200	22	17	21	39	20
25	45	44	40	47	146	33	1340	21	18	21	87	20
26	33	45	41	51	179	33	1030	22	19	22	50	21
27	30	46	40	61	709	32	630	22	20	23	56	20
28	30	45	39	81	593	31	346	21	21	22	e70	20
29	196	44	41	127	457	32	159	21	25	24	e37	20
30	148	45	41	190	---	31	83	22	34	23	e30	20
31	49	---	40	157	---	30	---	22	---	26	e30	---
TOTAL	1120	6096	1315	1878	5668	2695	6894	879	596	644	935	623
MEAN	36.1	203	42.4	60.6	195	86.9	230	28.4	19.9	20.8	30.2	20.8
MAX	196	3220	52	190	939	386	1340	64	34	26	87	30
MIN	22	43	39	39	60	30	23	21	17	17	15	18
AC-FT	2220	12090	2610	3730	11240	5350	13670	1740	1180	1280	1850	1240

CAL YR 1987 TOTAL 27395 MEAN 75.1 MAX 3220 MIN 14 AC-FT 54340
WTR YR 1988 TOTAL 29343 MEAN 80.2 MAX 3220 MIN 15 AC-FT 58200

e Estimated

09505220 ROCKY GULCH NEAR RIMROCK, AZ

LOCATION.--Lat 34°44'49, long 111°29'38", in SE¼NW¼ sec.27, T.16 N., R.8 E., Coconino County, Hydrologic Unit 15060202, in Coconino National Forest, on right bank, on headwaters of Rocky Gulch, and 7 mi northwest of Rimrock.

DRAINAGE AREA.--1.40 mi^2.

PERIOD OF RECORD.--October 1985 to current year. Prior to October 1985, station operated by the U.S. Forest Service (records unpublished).

GAGE.--Water-stage recorder and concrete flume. Elevation of gage is 6,750 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48 ft^3/s Apr. 25, 1988, gage height, 2.67 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48 ft^3/s, Apr. 25, gage height, 2.67 ft; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	7.2	.08	.00	1.1	1.9	.11	.30	.07	.01	.01	.63
2	.00	1.6	.03	.00	.98	1.4	.11	.25	.07	.01	.01	.15
3	.00	.43	.04	.00	6.2	1.1	.11	.19	.07	.00	.01	.09
4	.00	.13	.02	.00	3.1	1.0	.11	.16	.07	.00	.01	.07
5	.00	.07	.07	.00	1.5	.91	.11	.14	.07	.01	.01	.04
6	.00	1.6	.04	.16	1.2	.74	.11	.14	.07	.01	.01	.03
7	.00	1.1	.00	.07	1.3	.63	.11	.12	.07	.01	.01	.03
8	.00	.41	.24	.07	1.8	.43	.11	.11	.07	.01	.01	.03
9	.00	.15	.04	.07	2.6	.30	.11	.11	.07	.01	.00	.03
10	.00	.08	.12	.04	2.9	.28	.11	.11	.07	.01	.00	.03
11	.00	.03	.01	.07	2.6	.21	.11	.11	.04	.01	.00	.03
12	.00	.03	.15	.09	e3.0	.19	.11	.11	.03	.01	.00	.03
13	.00	.03	.32	.08	e2.5	.16	.11	.11	.03	.01	.00	.03
14	.00	.03	.07	.07	e2.2	.14	.11	.11	.03	.01	.00	.03
15	.00	.03	.07	.07	e1.9	.14	.11	.11	.03	.01	.00	.03
16	.00	.01	.05	.04	e1.7	.14	.11	.11	.02	.02	.00	.03
17	.00	.00	.00	.05	e1.3	.12	.11	.11	.03	.02	.00	.03
18	.00	.00	.00	.07	e.98	.11	.83	.11	.02	.02	.00	.03
19	.00	.00	.00	.07	.64	.11	2.3	.11	.02	.02	.00	.03
20	.00	.00	.00	.04	.57	.11	1.3	.11	.02	.03	.00	.03
21	.00	.00	.00	.03	.88	.11	.69	.10	.03	.02	.00	.02
22	.00	.00	.00	.03	1.6	.11	1.4	.07	.01	.02	.00	.01
23	.00	.00	.00	.07	2.0	.11	4.8	.07	.01	.02	.46	.01
24	.02	.00	.00	.26	2.2	.11	12	.07	.01	.02	.15	.01
25	.00	.00	.00	.23	2.3	.11	19	.07	.00	.02	.02	.01
26	.00	.11	.00	.38	4.0	.11	12	.07	.01	.02	.13	.01
27	.00	.05	.00	.82	11	e.11	4.6	.07	.00	.02	.88	.01
28	.00	.04	.00	1.4	3.9	e.11	2.1	.07	.01	.02	.32	.01
29	.11	.06	.00	2.1	2.8	e.11	.93	.07	.01	.01	.21	.01
30	.06	.08	.00	2.3	---	e.11	.46	.07	.01	.02	.31	.01
31	.00	---	.00	1.7	---	e.11	---	.07	---	.04	1.3	---
TOTAL	0.19	13.27	1.35	10.38	70.75	11.33	64.28	3.53	1.07	0.47	3.86	1.54
MEAN	.006	.44	.044	.33	2.44	.37	2.14	.11	.036	.015	.12	.051
MAX	.11	7.2	.32	2.3	11	1.9	19	.30	.07	.04	1.3	.63
MIN	.00	.00	.00	.00	.57	.11	.11	.07	.00	.00	.00	.01
AC-FT	.4	26	2.7	21	140	22	127	7.0	2.1	.9	7.7	3.1

CAL YR 1987 TOTAL 139.17 MEAN .38 MAX 7.2 MIN .00 AC-FT 276
WTR YR 1988 TOTAL 182.02 MEAN .50 MAX 19 MIN .00 AC-FT 361

e Estimated

09505260 MONTEZUMA WELL OUTLET NEAR RIMROCK, AZ

LOCATION.--Lat 34°38'53", long 111°45'02", in NE¼, sec.31, T.15 N., R.6 E , Yavapai County, Hydrologic Unit 15060202, in Montezuma Castle National Monument, on left bank 100 ft downstream from outlet of Montezuma Well, and 2.5 mi northeast of Rimrock.

PERIOD OF RECORD.--1948-59, 1961, 1976 (three or less discharge measurements each year); April 1977 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Elevation of gage is 3,560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--11 years (water years 1978-88), 2.21 ft^3/s, 1,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3.2 ft^3/s Apr. 4, 8-20, July 17-23, 26-31, Aug. 6, 7, 13-16, 21, 1979; minimum daily, 0.90 ft^3/s Oct. 4, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 2.7 ft^3/s Dec. 5, 6, Feb. 21-24, Mar. 21, 22, Apr. 1, 2, 4-6; minimum daily, 1.4 ft^3/s Oct. 10, 11..

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	2.5	2.5	2.5	e2.4	2.5	2.7	2.0	2.3	2.1	2.2	2.0
2	1.6	2.5	2.6	2.4	e2.4	2.5	2.7	2.1	2.3	2.0	2.1	2.0
3	1.7	2.5	2.6	2.4	e2.4	2.5	2.6	e2.2	2.3	2.0	2.1	1.9
4	1.7	2.4	2.6	2.4	e2.4	2.5	2.7	e2.4	2.3	2.0	2.2	1.9
5	1.6	2.4	2.7	2.3	e2.4	2.5	2.7	2.4	2.3	2.0	2.2	2.0
6	1.6	2.5	2.7	2.3	e2.4	2.5	2.7	2.3	2.3	2.0	2.2	2.0
7	1.6	2.5	2.6	2.3	e2.4	2.5	2.6	2.3	2.3	2.0	2.2	2.0
8	1.6	2.5	2.6	2.3	e2.5	2.5	2.6	2.3	2.3	2.0	2.2	2.0
9	1.5	2.5	2.6	2.3	e2.5	2.5	2.5	2.3	2.4	2.0	2.2	2.0
10	1.4	2.5	2.5	2.3	e2.5	2.5	2.5	2.3	2.4	1.9	2.2	2.0
11	1.4	2.5	e2.5	2.3	e2.5	2.5	2.5	2.3	2.3	1.9	2.2	1.9
12	1.5	2.5	e2.3	2.3	e2.5	2.5	2.5	2.4	2.3	1.9	2.2	1.9
13	1.5	2.5	e2.0	2.2	e2.5	2.5	2.5	2.3	2.3	1.9	2.2	1.9
14	1.6	2.5	2.0	2.1	e2.5	2.5	2.5	2.3	2.3	1.9	2.2	1.9
15	1.6	2.5	2.0	2.2	e2.6	2.5	2.5	2.3	2.3	1.9	2.2	1.9
16	1.5	2.5	2.1	2.3	e2.6	2.5	2.4	2.3	2.3	1.8	2.1	1.8
17	1.5	2.5	2.3	2.3	e2.6	2.5	2.4	2.3	2.2	1.7	2.1	1.8
18	1.6	2.5	2.3	2.3	e2.6	2.5	2.4	2.3	2.2	1.7	2.1	1.7
19	1.6	2.5	2.3	2.3	e2.6	2.6	2.4	2.3	2.2	1.7	2.0	1.7
20	1.6	2.5	2.3	2.3	e2.6	2.6	2.3	2.3	2.2	1.7	2.0	1.7
21	1.6	2.5	2.3	2.3	e2.7	2.7	2.4	2.2	2.2	1.6	2.0	1.7
22	1.6	2.5	2.3	2.3	e2.7	2.7	2.4	2.3	2.3	1.6	2.0	1.7
23	1.6	2.5	2.3	2.2	e2.7	2.5	2.3	2.3	2.2	1.6	2.0	1.7
24	1.6	2.5	2.3	2.2	e2.7	2.5	2.3	2.3	2.3	1.6	2.0	1.7
25	1.5	2.5	2.3	2.2	2.6	2.5	2.3	2.3	2.2	1.6	2.0	1.7
26	1.6	2.5	2.3	e2.2	2.6	2.5	2.2	2.3	2.2	1.6	2.0	1.7
27	1.7	2.5	2.3	e2.2	2.5	2.6	2.2	2.3	2.2	e1.6	2.0	1.7
28	2.0	2.5	2.4	e2.2	2.5	2.6	2.2	2.3	2.2	e2.0	2.0	1.7
29	2.3	2.5	2.4	e2.3	2.5	2.6	2.2	2.3	2.2	2.1	2.0	1.6
30	2.5	2.5	2.4	e2.3	---	2.6	2.1	2.2	2.1	2.1	2.0	1.6
31	2.5	---	2.4	e2.3	---	2.6	---	2.3	---	2.2	2.0	---
TOTAL	51.8	74.8	73.8	70.8	73.4	78.6	73.3	70.8	67.9	57.7	65.1	54.8
MEAN	1.67	2.49	2.38	2.28	2.53	2.54	2.44	2.28	2.26	1.86	2.10	1.83
MAX	2.5	2.5	2.7	2.5	2.7	2.7	2.7	2.4	2.4	2.2	2.2	2.0
MIN	1.4	2.4	2.0	2.1	2.4	2.5	2.1	2.0	2.1	1.6	2.0	1.6
AC-FT	103	148	146	140	146	156	145	140	135	114	129	109

CAL YR 1987 TOTAL 813.9 MEAN 2.23 MAX 2.8 MIN 1.4 AC-FT 1610
WTR YR 1988 TOTAL 812.8 MEAN 2.22 MAX 2.7 MIN 1.4 AC-FT 1610

e Estimated

09505350 DRY BEAVER CREEK NEAR RIMROCK, AZ

LOCATION.--Lat 34°43'43", long 111°46'30", in NE¼NW¼ sec. 1, T.15 N., R.5 E., Yavapai County, Hydrologic Unit 15060202, in Coconino National Forest, on left upstream abutment of abandoned highway bridge, 1,000 ft upstream from present State Highway 179, and 5.5 mi north of Rimrock.

DRAINAGE AREA.--142 mi^2.

PERIOD OF RECORD.--October 1960 to current year.

REVISED RECORDS.--WRD Ariz. 1969: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 3,694.38 ft above National Geodetic Vertical Datum of 1929 (Arizona Highway Department bench mark).

REMARKS.--Records good. No known diversions above station.

AVERAGE DISCHARGE.--28 years, 47.7 ft^3/s, 34,560 acre-ft/yr; median of yearly mean discharges, 36 ft^3/s, 26,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,600 ft^3/s Sept. 5, 1970, gage height, 14.35 ft, from rating curve extended above 6,000 ft^3/s on basis of computation of peak flow over weir at gage height 9.07 ft and 9.69 ft and slope-area measurement at gage height 14.35 ft; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1115	1,070	4.89	Apr. 25	1900	*2,650	*6.27
Feb. 3	0100	2,490	6.16				

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	385	.00	.00	57	239	.21	34	.00	.00	.00	49
2	.00	224	.00	.00	241	163	.06	17	.00	.00	.00	11
3	.00	56	.00	.00	1190	119	.04	11	.00	.00	.00	4.4
4	.00	14	.00	.00	272	92	.06	6.8	.00	.00	.00	1.7
5	.00	5.8	.13	.00	84	92	.03	4.6	.00	.00	.00	.31
6	.00	161	.15	.00	47	106	e.02	3.1	.00	.00	.00	.04
7	.00	98	.01	.00	41	102	e.01	1.7	.00	.00	.00	.01
8	.00	28	.00	.00	43	77	e.01	.86	.00	.00	.00	.00
9	.00	11	.00	.00	69	44	e.01	.36	.00	.00	.00	.00
10	.00	5.3	.00	.00	92	30	.01	.13	.00	.00	.00	.00
11	.00	2.8	.00	.00	95	20	.01	.05	.00	.00	.00	.00
12	.00	.98	.00	.00	71	12	.00	.03	.00	.00	.00	.00
13	.00	.30	.00	.00	93	8.1	.00	.03	.00	.00	.00	.00
14	.00	e.10	.00	.00	84	5.7	.00	.02	.00	.00	.00	.00
15	.00	e.05	.00	.00	48	4.3	.00	.02	.00	.00	.00	.00
16	.00	e.02	.00	.01	49	2.9	.01	.01	.00	.00	.00	.00
17	.00	e.01	.00	.03	54	1.7	.49	.01	.00	.00	.00	.00
18	.00	e.01	.00	3.2	32	1.2	161	.01	.00	.00	.37	.00
19	.00	.01	.00	3.9	19	.93	356	.01	.00	.00	.00	.00
20	.00	.00	.00	1.9	12	.44	199	.00	.00	.00	.00	.00
21	.00	.00	.00	1.1	8.2	.17	198	.00	.00	.00	.00	.00
22	.00	.00	.00	.75	16	.07	733	.00	.00	.00	.00	.00
23	.00	.00	.00	.52	34	.04	1010	.00	.00	.00	.00	.00
24	.00	.00	.00	.35	52	1.3	1230	.00	.00	.00	.00	.00
25	.00	.00	.00	1.1	59	5.0	1210	.00	.00	.00	2.8	.00
26	.00	.00	.00	5.4	84	4.7	995	.00	.00	.00	.18	.00
27	.00	.00	.00	32	455	4.0	624	.00	.00	.00	2.6	.00
28	.00	.00	.00	73	270	3.0	364	.00	.00	.00	68	.00
29	23	.00	.00	123	273	2.1	172	.00	.00	.00	57	.00
30	2.3	.00	.00	147	---	1.4	72	.00	.00	.00	35	.00
31	.56	---	.00	98	---	.70	---	.00	---	.00	10	---
TOTAL	25.86	992.38	0.29	491.26	3944.2	1143.75	7324.97	79.74	0.00	0.00	175.93	66.46
MEAN	.83	33.1	.009	15.8	136	36.9	244	2.57	.00	.00	5.68	2.22
MAX	23	385	.15	147	1190	239	1230	34	.00	.00	68	49
MIN	.00	.00	.00	.00	8.2	.04	.00	.00	.00	.00	.00	.00
AC-FT	51	1970	.6	974	7820	2270	14530	158	.0	.0	349	132

CAL YR 1987 TOTAL 10649.80 MEAN 29.2 MAX 620 MIN .00 AC-FT 21120
WTR YR 1988 TOTAL 14244.84 MEAN 38.9 MAX 1230 MIN .00 AC-FT 28250

e Estimated

09505800 WEST CLEAR CREEK NEAR CAMP VERDE, AZ

LOCATION.--Lat 34°32'19", long 111°41'36", in NW¼NW¼ sec.11, T.13 N., R.6 E., Yavapai County, Hydrologic Unit 15060203, in Coconino National Forest, on left bank at Bull Pen Ranch, 11 mi upstream from mouth, and 9 mi east of Camp Verde.

DRAINAGE AREA.--241 mi^2.

PERIOD OF RECORD.--December 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,630 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good, except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--23 years, 69.0 ft^3/s, 49,990 acre-ft/yr; median of yearly mean discharges, 54 ft^3/s, 39,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,400 ft^3/s Dec. 18, 1978, gage height, 11.6 ft, from floodmarks and rating curve extended above 2,700 ft^3/s on basis of slope-area measurements at gage heights 8.3 ft and 10.15 ft; minimum daily, 11 ft^3/s Aug. 1, 22, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 3	0230	4,630	7.64	Aug. 29	1630	*6,540	*8.32
Apr. 23	1800	1,800	6.18				

Minimum daily discharge, 14 ft^3/s June 12-17, Aug. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	112	17	17	e40	184	20	41	16	19	21	112
2	17	153	17	16	e175	132	20	37	16	17	19	55
3	17	69	17	18	1710	93	19	34	16	19	18	34
4	17	37	17	18	339	78	19	31	16	18	17	26
5	17	28	20	18	216	66	19	28	15	16	17	22
6	17	31	19	21	139	65	19	26	15	16	22	19
7	17	65	19	21	118	62	18	26	15	16	22	18
8	17	31	18	21	96	56	18	25	15	16	17	17
9	17	24	18	20	89	48	17	24	15	16	16	16
10	18	25	18	19	101	41	17	23	15	16	14	16
11	18	22	18	18	136	37	17	23	15	16	15	15
12	18	20	18	18	129	34	17	22	14	16	15	16
13	20	19	18	18	117	31	17	21	14	16	15	15
14	20	19	18	17	123	29	17	20	14	16	15	15
15	20	20	18	17	101	27	18	20	14	15	15	15
16	19	19	18	19	72	25	22	20	14	15	16	15
17	19	18	19	20	81	24	23	19	14	15	16	15
18	18	17	20	28	78	23	27	19	16	15	17	15
19	18	16	19	25	53	22	26	19	15	15	19	15
20	18	16	19	21	40	21	27	18	16	16	20	15
21	18	16	19	19	34	20	27	18	16	19	21	15
22	19	16	18	19	32	20	304	18	16	18	22	15
23	22	16	18	19	30	20	778	18	15	16	22	15
24	22	16	19	19	64	21	922	17	15	16	23	15
25	21	16	18	19	91	21	794	16	15	15	29	15
26	20	16	18	19	105	21	388	16	16	15	41	15
27	20	16	18	23	240	21	191	16	16	15	118	15
28	19	17	17	37	405	20	114	16	16	15	110	15
29	24	17	18	108	245	20	71	16	16	16	613	15
30	28	17	18	193	---	20	50	16	18	15	112	15
31	28	---	17	e125	---	20	---	16	---	20	126	---
TOTAL	600	924	563	990	5199	1329	4036	679	459	504	1583	636
MEAN	19.4	30.8	18.2	31.9	179	42.9	135	21.9	15.3	16.3	51.1	21.2
MAX	28	153	20	193	1710	184	922	41	18	20	613	112
MIN	17	16	17	16	30	20	17	16	14	15	14	15
AC-FT	1190	1830	1120	1960	10310	2640	8010	1350	910	1000	3140	1260

CAL YR 1987 TOTAL 23747 MEAN 65.1 MAX 929 MIN 14 AC-FT 47100
WTR YR 1988 TOTAL 17502 MEAN 47.8 MAX 1710 MIN 14 AC-FT 34720

e Estimated

09507500 FOSSIL CREEK DIVERSIONS TO CHILDS POWERPLANT, NEAR CAMP VERDE, AZ

LOCATION.--Lat 34°22'06", long 111°39'56", in NE¼SW¼ sec.20, T.11 N., R.7 E. (unsurveyed), Yavapai County, Hydrologic Unit 15060203, at head of Stehr Lake, 2.3 mi northeast of Childs powerplant, 4.4 mi by flume downstream from Irving powerplant, and 17 mi southeast of Camp Verde.

PERIOD OF RECORD.--January 1952 to current year.

GAGE.--Water-stage recorder and weir in concrete flume. Datum of gage is 3,716.2 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records excellent except for estimated daily discharge, which are good. Record is obtained at the head of Stehr Lake, a regulatory basin, and shows the water used by Childs powerplant. Most of the flow originates at Fossil Springs, which are fairly constant. Diversion is made from Fossil Creek 8 mi upstream from this station and is first used by Irving powerplant. A second diversion from Fossil Creek enters the flume below Irving powerplant. Based on estimates and records for previous years, the flow through the Irving powerplant is estimated to be about 99 percent of the record published herewith.

AVERAGE DISCHARGE.--36 years, 43.3 ft^3/s, 31,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 58 ft^3/s Aug. 1, 2, 1982; no flow at times in most years.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	44	.00	43	e44	43	44	42	43	38	42	45
2	44	37	.00	43	e45	43	44	34	44	45	43	45
3	44	48	.00	43	e45	44	44	41	44	45	42	47
4	44	48	4.5	43	e45	44	43	42	44	45	42	47
5	44	47	22	43	e44	43	42	36	43	45	43	47
6	44	48	43	43	e45	43	42	42	43	45	43	47
7	44	48	44	44	e44	44	42	42	38	44	43	47
8	44	49	44	42	e45	42	42	42	46	43	43	48
9	44	49	38	43	e44	43	42	42	45	43	43	48
10	44	46	43	44	e44	43	43	42	46	44	43	47
11	44	47	43	44	e44	43	43	42	46	44	43	46
12	44	48	43	42	e45	44	43	42	46	44	43	46
13	44	47	43	44	e45	44	42	41	46	44	43	47
14	44	47	42	44	e45	43	42	42	43	44	43	47
15	44	47	43	44	e45	41	42	42	43	44	43	48
16	43	46	43	45	e45	42	42	43	33	44	43	49
17	43	46	43	44	e45	44	41	42	27	43	43	49
18	43	46	43	44	e45	44	40	42	46	44	44	49
19	43	46	43	43	e45	44	41	42	46	43	43	49
20	39	46	43	44	e45	44	41	43	45	44	45	48
21	46	45	43	44	e45	43	40	44	44	44	45	49
22	46	45	30	44	e45	43	38	44	44	44	44	48
23	46	45	18	44	45	42	39	44	45	44	44	47
24	46	45	43	44	45	41	36	44	46	44	44	48
25	46	45	43	44	45	41	38	44	45	44	44	48
26	46	45	43	44	45	42	39	44	44	44	45	47
27	47	45	42	44	44	42	40	44	42	43	44	48
28	48	45	42	44	42	41	37	44	44	44	45	47
29	48	45	43	e44	42	42	41	44	44	44	44	46
30	48	30	43	e45	---	43	42	44	38	44	34	45
31	47	---	43	e45	---	44	---	44	---	41	44	---
TOTAL	1386	1365	1100.50	1335	1292	1329	1235	1310	1293	1355	1337	1419
MEAN	44.7	45.5	35.5	43.7	44.6	42.9	41.2	42.3	43.1	43.7	43.1	47.3
MAX	48	49	44	45	45	44	44	44	46	45	45	49
MIN	39	30	.00	42	42	41	36	34	27	38	34	45
AC-FT	2750	2710	2180	2690	2560	2640	2450	2600	2560	2690	2650	2810

CAL YR 1987 TOTAL 15908.50 MEAN 43.6 MAX 49 MIN .00 AC-FT 31550
WTR YR 1988 TOTAL 15776.50 MEAN 43.1 MAX 49 MIN .00 AC-FT 31290

e Estimated

09507580 EAST VERDE RIVER DIVERSION FROM CLEAR CREEK, NEAR PINE, AZ

LOCATION.--Lat 34°25'04", long 111°15'47", in NW¼NE¼ sec.23, T.12 N., R.10 E. (unsurveyed), Gila County, Hydrologic Unit 15060203, on East Verde River at mouth of Mail Creek, 0.4 mi (revised) southeast of Washington Park, and 11 mi east of Pine.

PERIOD OF RECORD.--October 1965 to current year.

GAGE.--Water-stage recorder and weir in concrete flume. Datum of gage is 5,774 ft above National Geodetic Vertical Datum of 1929, (Phelps Dodge Corporation reference mark).

REMARKS.--No estimated daily discharges. Records excellent. Diversion is 9.5 mi northeast from Blue Ridge Reservoir, on East Clear Creek, in the Little Colorado River basin, to the East Verde River in the Gila River basin.

AVERAGE DISCHARGE.--22 years (water years 1967-88) 13.5 ft^3/s, 9,780 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 34 ft^3/s Apr. 19, 29, May 5-7, 10, 12, 15, 18, June 2, 1969; no flow for long periods each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	5.3	23	19	.00	.00	19	.00	19	19	19	19
2	22	8.1	23	19	.00	.00	20	.00	19	11	19	19
3	23	23	23	19	.00	.00	20	.00	19	7.4	19	19
4	23	21	23	19	.00	.00	20	.00	19	19	19	19
5	23	23	23	19	.00	.00	20	.00	20	19	19	19
6	23	23	23	19	.00	.00	20	.00	20	19	19	19
7	22	23	23	19	.00	.00	20	.00	19	19	19	19
8	23	23	23	19	.00	.00	20	.00	19	19	19	19
9	23	23	23	19	.00	.00	20	.00	20	11	19	19
10	23	23	23	19	.00	.00	20	.00	19	11	19	19
11	23	23	23	19	.00	.00	20	.00	20	19	19	19
12	22	23	23	19	.00	.00	20	.00	19	19	19	19
13	23	23	23	19	.00	.00	20	8.0	19	19	19	19
14	23	20	23	19	.00	.00	20	19	20	19	19	19
15	23	23	23	19	.00	.00	20	19	19	19	19	19
16	23	23	23	19	.00	.00	20	19	19	19	19	19
17	23	23	23	19	.00	.00	20	16	19	19	19	19
18	23	23	23	1.1	.00	.00	20	4.6	19	19	19	19
19	23	23	23	.00	.00	.00	20	18	19	18	19	19
20	23	23	23	2.0	.00	.00	20	19	19	19	19	19
21	22	23	23	1.2	.00	.00	20	19	19	20	19	19
22	23	23	23	.00	.00	.00	20	20	19	19	19	20
23	23	17	23	.00	.00	.00	20	19	19	19	18	19
24	23	19	23	.00	.00	.00	20	19	19	20	6.6	19
25	23	23	23	.00	.00	.00	20	20	19	19	11	19
26	23	23	23	.00	.00	.00	9.3	19	19	19	18	19
27	22	23	19	.00	.00	.00	.00	19	18	19	18	19
28	22	23	21	.00	.00	.00	.00	19	19	18	19	19
29	22	23	19	.00	.00	.00	.00	19	19	19	19	19
30	23	23	19	.00	---	.00	.00	19	19	20	19	19
31	22	---	19	.00	---	7.3	---	20	---	19	19	---
TOTAL	705	642.4	695	327.30	0.00	7.30	508.30	334.60	574	554.4	565.6	571
MEAN	22.7	21.4	22.4	10.6	.00	.24	16.9	10.8	19.1	17.9	18.2	19.0
MAX	23	23	23	19	.00	7.3	20	20	20	20	19	20
MIN	22	5.3	19	.00	.00	.00	.00	.00	18	7.4	6.6	19
AC-FT	1400	1270	1380	649	.0	14	1010	664	1140	1100	1120	1130

CAL YR 1987 TOTAL 5100.97 MEAN 14.0 MAX 24 MIN .00 AC-FT 10120
WTR YR 1988 TOTAL 5484.90 MEAN 15.0 MAX 23 MIN .00 AC-FT 10880

09507980 EAST VERDE RIVER NEAR CHILDS, AZ

LOCATION.--Lat 34°17'00", long 111°38'50", in sec.21, T.11 N., R.7 E. (unsurveyed), Gila County Hydrologic Unit 15060203, in Tonto National Forest, on left bank 1.3 mi upstream from mouth and 6 mi southeast of Childs.

DRAINAGE AREA.--328 mi^2.

PERIOD OF RECORD.--September 1961 to December 1965, May 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,500 ft above National Geodetic Vertical Datum (NGVD) of 1929, from topographic map. Sept. 1, 1961, to Dec. 15, 1965, at site 1 mi upstream at elevation of 2,600 ft above NGVD of 1929, datum raised 0.38 ft Oct. 4, 1963. May 25, 1967, to July 20, 1972, at present site at datum 1.29 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Since September 30, 1965, records include transbasin diversions from east Clear Creek to headwaters of East Verde River. (See sta 09507580 and 09398300.)

AVERAGE DISCHARGE.--21 years (water years 1968-88), 72.9 ft^3/s, 52,820 acre-ft/yr; median of yearly mean discharges, 57 ft^3/s, 41,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,500 ft^3/s Sept. 5, 1970, gage height, 20.5 ft, present datum, from profile past gage, from rating curve extended above 960 ft^3/s on basis of slope-area measurements at gage heights 10.11 and 20.5 ft, present datum; minimum daily, 0.20 ft^3/s June 19 to July 8, 1963, July 21-28, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1815	1,890	5.38	Apr. 22	2100	1,410	4.68
Jan. 18	0530	1,330	4.56	Aug. 28	0145	1,190	4.33
Feb. 3	0815	*4,000	*7.74	Aug. 29	0645	1,790	5.24

Minimum daily discharge, 8.3 ft^3/s July 6.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	767	32	34	59	63	10	53	27	20	22	160
2	22	501	32	35	60	60	9.9	44	27	20	51	119
3	21	136	33	35	1840	55	20	32	25	19	95	75
4	20	79	33	35	469	48	24	29	24	15	64	54
5	20	58	35	35	217	42	25	24	23	9.0	156	43
6	20	66	34	139	141	37	25	22	22	8.3	81	37
7	20	72	32	105	111	34	25	21	19	10	41	34
8	20	56	33	58	e90	32	25	21	18	12	27	32
9	20	47	33	46	e77	30	25	21	18	14	25	30
10	20	42	33	39	e68	28	23	19	18	16	24	28
11	20	39	33	36	e59	26	24	17	19	19	23	28
12	21	37	33	34	e53	24	24	16	21	11	23	29
13	24	35	34	32	e48	22	24	15	21	15	23	28
14	27	36	33	32	e44	21	25	14	20	15	22	26
15	32	39	33	33	e39	20	26	15	19	15	22	25
16	25	35	34	35	e37	e18	42	30	19	14	22	24
17	24	34	37	67	e35	e17	79	23	19	13	21	23
18	23	34	45	644	e33	e16	189	27	20	14	23	23
19	24	33	48	212	e31	e15	75	27	21	18	23	23
20	23	32	73	107	e30	e14	54	18	21	53	23	23
21	23	32	57	68	e29	e14	77	24	21	38	99	27
22	24	32	47	59	e28	e13	964	24	20	25	47	43
23	20	32	45	59	e27	e12	555	23	18	22	29	28
24	21	32	42	106	e27	e12	303	24	15	22	44	26
25	27	34	39	83	27	e11	227	23	17	19	35	25
26	27	34	38	78	28	e10	189	25	19	22	23	24
27	25	32	35	122	41	e10	145	25	21	19	97	23
28	25	32	34	132	75	e10	111	25	19	21	453	22
29	27	32	37	119	71	e10	87	25	19	28	471	22
30	42	32	33	96	---	10	67	25	21	24	152	22
31	47	---	33	73	---	10	---	26	---	22	121	---
TOTAL	756	2502	1173	2788	3894	744	3498.9	757	611	594.3	2382	1126
MEAN	24.4	83.4	37.8	89.9	134	24.0	117	24.4	20.4	19.2	76.8	37.5
MAX	47	767	73	644	1840	63	964	53	27	53	471	160
MIN	20	32	32	32	27	10	9.9	14	15	8.3	21	22
AC-FT	1500	4960	2330	5530	7720	1480	6940	1500	1210	1180	4720	2230

CAL YR 1987 TOTAL 15825.5 MEAN 43.4 MAX 767 MIN 8.2 AC-FT 31390
WTR YR 1988 TOTAL 20826.2 MEAN 56.9 MAX 1840 MIN 8.3 AC-FT 41310

e Estimated

09508300 WET BOTTOM CREEK NEAR CHILDS, AZ
(Hydrologic bench mark station)

LOCATION.--Lat 34°09'39", long 111°41'32", in sec.36, T.9 N., R.6 E. (unsurveyed), Gila County, Hydrologic Unit 15060203, in Tonto National Forest, on right bank 1.4 mi upstream from mouth and 13 mi south of Childs.

DRAINAGE AREA.--36.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1967 to current year.

REVISED RECORDS.--WRD Ariz. 1970: 1968(M).

GAGE.--Water-stage recorder. Elevation of gage is 2,320 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

AVERAGE DISCHARGE.--21 years (water years 1968-88), 15.2 ft^3/s, 11,010 acre-ft/yr; median of yearly mean discharges, 11 ft^3/s, 8,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,830 ft^3/s Feb. 19, 1980, gage height, 16.0 ft, from high-water mark in gage well, from rating curve extended above 3,000 ft^3/s on basis of slope-area measurements at gage heights 9.77, 14.18, and 15.66 ft; no flow for many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1415	517	6.43	Aug. 26	2045	283	5.87
Jan. 6	0945	132	5.32	Aug. 27	1815	1,050	7.27
Jan. 18	0720	668	6.69	Aug. 29	0630	1,620	7.97
Feb. 3	0545	*1,840	*8.22	Aug. 29	2130	905	7.06
Apr. 22	0930	656	6.67	Sept. 1	1900	750	6.83

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	191	1.0	10	22	2.3	.84	5.6	.37	.00	.53	166
2	.06	183	1.0	8.9	19	2.5	.83	4.4	.30	.00	.52	152
3	.02	57	1.0	8.0	659	2.7	.80	3.7	.22	.00	.46	35
4	.01	27	.94	7.2	196	2.8	.78	3.3	.15	.00	.38	19
5	.00	16	1.2	7.0	72	2.5	.78	2.9	.07	.00	.66	11
6	.00	15	1.2	70	37	2.1	.71	2.6	.00	.00	.53	7.9
7	.00	39	1.1	60	28	2.0	.71	2.4	.00	.00	.49	5.1
8	.00	25	1.0	39	22	1.8	.70	2.2	.00	.00	.37	3.6
9	.00	16	1.1	28	17	1.6	.63	2.0	.00	.00	.32	2.8
10	.01	10	1.3	21	14	1.5	.62	1.7	.00	.00	.26	2.3
11	.05	7.9	1.3	17	11	1.4	.63	1.5	.00	.07	.15	1.8
12	.13	5.9	1.2	13	8.9	1.4	.64	1.3	.00	.06	.05	1.4
13	.29	4.4	1.2	10	7.7	1.4	.64	1.1	.00	.00	.02	1.1
14	.35	3.6	1.2	8.9	6.5	1.3	.70	.92	.00	.00	.00	1.0
15	.32	3.5	1.2	7.8	5.4	1.3	.77	.83	.00	.00	.00	.83
16	.28	3.7	1.2	7.7	4.6	1.2	1.1	.77	.00	.00	.00	.69
17	.24	3.3	1.7	22	3.9	1.2	1.2	.73	.00	.00	.00	.58
18	.23	2.9	13	505	3.5	1.1	14	.67	.00	.00	.00	.51
19	.23	2.6	46	216	3.3	1.1	12	.63	.00	.00	.00	.46
20	.21	2.4	33	103	3.1	1.0	8.6	.57	.00	.21	.00	.43
21	.21	2.3	20	64	2.9	1.0	8.7	.54	.00	.35	.31	.41
22	.27	2.0	12	56	2.7	1.0	458	.52	.00	.19	1.6	.36
23	.56	1.8	9.7	48	2.5	1.0	254	.49	.00	.12	5.6	.35
24	.48	1.6	13	72	2.4	1.0	125	.46	.00	.00	3.3	.34
25	.44	1.5	11	50	2.2	.94	49	.42	.00	.00	2.6	.32
26	.36	1.4	9.9	39	2.0	.93	27	.37	.00	.00	28	.30
27	.33	1.3	9.4	53	2.1	.87	18	.32	.00	.00	193	.29
28	.34	1.2	9.7	60	2.0	.82	12	.30	.00	.19	132	.24
29	.48	1.2	13	57	2.0	.81	9.1	.30	.00	.67	338	.20
30	.82	1.0	14	41	---	.83	7.3	.38	.00	.46	207	.19
31	.63	---	13	29	---	.82	---	.44	---	.56	44	---
TOTAL	7.40	634.5	246.54	1738.5	1164.7	44.22	1015.78	44.36	1.11	2.88	960.15	416.50
MEAN	.24	21.1	7.95	56.1	40.2	1.43	33.9	1.43	.037	.093	31.0	13.9
MAX	.82	191	46	505	659	2.8	458	5.6	.37	.67	338	166
MIN	.00	1.0	.94	7.0	2.0	.81	.62	.30	.00	.00	.00	.19
AC-FT	15	1260	489	3450	2310	88	2010	88	2.2	5.7	1900	826

CAL YR 1987 TOTAL 4317.65 MEAN 11.8 MAX 334 MIN .00 AC-FT 8560
WTR YR 1988 TOTAL 6276.64 MEAN 17.1 MAX 659 MIN .00 AC-FT 12450

09508300 WET BOTTOM CREEK NEAR CHILDS, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1968 to current year.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
DEC 1987											
15...	1300	1.1	285	6.80	7.5	6.0	0.40	705	11.3	99	K1
FEB 1988											
24...	1330	2.3	165	7.00	24.0	13.0	0.80	703	7.3	75	K10
MAY											
25...	1130	0.42	257	7.15	30.0	23.0	0.30	705	8.1	102	K11
AUG											
25...	1200	2.2	210	7.20	35.0	28.0	0.40	700	7.2	101	150

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
DEC 1987											
15...	110	0	28	8.6	23	1	1.1	160	0	0	131
FEB 1988											
24...	59	0	16	4.6	11	0.6	0.80	87	0	0	71
MAY											
25...	100	0	27	7.8	19	0.9	1.0	--	--	0	--
AUG											
25...	87	0	23	7.1	20	1	1.1	126	0	0	103

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)
DEC 1987											
15...	7.5	2.1	35	187	193	0.25	<0.010	<0.100	0.010	<0.010	0.29
FEB 1988											
24...	4.7	0.90	25	112	111	0.15	0.020	<0.100	<0.010	0.010	--
MAY											
25...	7.1	1.5	34	170	175	0.23	<0.010	<0.100	<0.010	<0.010	--
AUG											
25...	6.9	1.8	37	157	166	0.21	<0.010	<0.100	<0.010	0.020	--

DATE	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P) (00673)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
DEC 1987											
15...	<0.010	0.010	<0.010	--	0.01	30	11	26	<0.5	<1	<1
FEB 1988											
24...	<0.010	0.010	<0.010	--	0.01	80	6	21	<0.5	<1	<1
MAY											
25...	0.010	0.020	<0.010	0.01	0.02	<10	13	29	<0.5	<1	<1
AUG											
25...	0.010	0.010	<0.010	0.01	0.01	50	17	23	<0.5	2	<1

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09508300 WET BOTTOM CREEK NEAR CHILDS, AZ--Continued

WATER QUALITY DATA

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)
DEC 1987												
15...	4	44	<5	25	4	<0.1	<10	<1	<1	<1.0	150	<6
FEB 1988												
24...	8	53	<5	17	9	<0.1	<10	1	<1	<1.0	80	<6
MAY												
25...	1	61	<5	31	9	<0.1	<10	2	<1	1.0	150	<6
AUG												
25...	<1	*75	<5	28	4	<0.1	<10	3	<1	<1.0	120	<6

DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
DEC 1987												
15...	14	--	--	--	--	--	--	--	--	100	0	0.0
FEB 1988												
24...	6	1.5	<0.4	1.4	<0.4	1.1	<0.4	0.08	0.35	100	1	0.01
MAY												
25...	7	--	--	--	--	--	--	--	--	50	0	0.0
AUG												
25...	<3	1.2	<0.4	1.7	<0.4	1.3	<0.4	0.05	0.37	100	1	0.01

* Value verified.
< Actual value is known to be less than value shown.

The following data were omitted from the 1987 report.

DATE	TIME	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)
DEC 1986		
11...	1115	42
FEB 1987		
10...	1215	51
MAY		
14...	1145	112
AUG		
12...	1310	175

09508500 VERDE RIVER BELOW TANGLE CREEK, ABOVE HORSESHOE DAM, AZ
(National stream-quality accounting network station)

LOCATION.--Lat 34°04'23", long 111°42'56", in sec.35, T.9 N., R.6 E. (unsurveyed), Yavapai County, Hydrologic Unit 15060203, in Tonto National Forest, on right bank 1.3 mi downstream from Tangle Creek and 9 mi upstream from Horseshoe Dam.

DRAINAGE AREA.--5,872 mi^2, includes 373 mi^2 in Aubrey Valley Playa, a closed basin.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1945 to current year.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,029.0 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. About 12,500 acres above station are irrigated by surface water and ground water. Low flow slightly regulated by powerplant 32 mi above station, using water from Fossil Creek. This station is above all major reservoirs on Verde River.

AVERAGE DISCHARGE.--43 years, 567 ft^3/s, 410,800 acre-ft/yr; median of yearly mean discharges, 460 ft^3/s, 333,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 94,800 ft^3/s Feb. 15, 1980, gage height, 21.41 ft; minimum, 48 ft^3/s June 17, 1956, July 18, 19, 1958, caused by power regulation on Fossil Creek; minimum daily, 61 ft^3/s July 18, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1924, 100,000 ft^3/s Mar. 3, 1938, gage height, 19.0 ft, from floodmarks, based on comparison with peak discharge at other stations on Verde River.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 2	0415	16,400	13.39	Feb. 28	2345	4,310	8.77
Nov. 7	0345	4,480	8.89	Apr. 25	1645	11,200	12.00
Feb. 3	1315	*19,800	*14.10	Aug. 29	0900	4,760	9.08

Minimum daily discharge, 133 ft^3/s June 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	213	2540	328	335	954	2770	221	866	163	169	245	1570
2	200	9620	332	331	762	2130	228	649	167	186	257	1030
3	196	3250	338	330	9460	1560	219	518	164	182	305	666
4	189	1510	337	332	5510	1220	230	438	161	174	430	478
5	183	951	343	337	2520	988	229	384	158	172	386	386
6	186	762	394	444	1500	885	212	341	156	161	317	332
7	179	3550	389	580	1120	848	203	309	153	154	298	290
8	169	2270	372	459	913	790	196	292	150	151	285	261
9	174	1250	342	446	804	730	186	278	149	149	240	245
10	179	836	338	409	819	609	183	265	146	162	218	230
11	185	644	335	384	1000	523	180	245	145	184	195	205
12	192	536	335	373	1120	480	179	233	143	176	178	196
13	191	479	338	365	1040	437	179	222	143	170	161	193
14	206	448	340	362	1000	395	184	211	142	164	154	200
15	211	440	342	357	1020	367	192	196	140	155	151	192
16	216	417	338	364	893	322	224	180	139	152	147	192
17	217	402	364	375	737	302	284	186	133	151	145	187
18	216	390	439	2110	750	298	475	179	147	158	141	188
19	216	372	473	1310	696	285	1280	181	140	161	143	189
20	215	358	497	810	572	276	2390	179	140	157	143	190
21	219	349	424	611	486	270	1440	165	140	205	276	181
22	224	344	378	535	432	269	3260	164	140	174	265	188
23	228	343	356	488	398	260	8000	168	139	161	276	187
24	234	343	377	523	409	243	8000	164	140	153	310	188
25	262	340	360	533	552	225	9110	165	141	147	317	189
26	281	332	359	472	700	221	7660	163	142	142	316	186
27	284	328	356	556	819	212	5250	162	140	142	604	185
28	270	332	348	691	2800	208	3200	162	140	180	1180	189
29	280	334	342	892	3390	209	1910	163	157	194	2400	190
30	589	336	343	1100	---	213	1250	162	163	176	1780	188
31	800	---	340	1140	---	217	---	164	---	199	1160	---
TOTAL	7604	34406	11297	18354	43176	18762	56754	8154	4421	5161	13423	9291
MEAN	245	1147	364	592	1489	605	1892	263	147	166	433	310
MAX	800	9620	497	2110	9460	2770	9110	866	167	205	2400	1570
MIN	169	328	328	330	398	208	179	162	133	142	141	181
AC-FT	15080	68240	22410	36410	85640	37210	112600	16170	8770	10240	26620	18430

CAL YR 1987 TOTAL 195771 MEAN 536 MAX 9620 MIN 107 AC-FT 388300
WTR YR 1988 TOTAL 230803 MEAN 631 MAX 9620 MIN 133 AC-FT 457800

09508500 VERDE RIVER BELOW TANGLE CREEK ABOVE HORSESHOE DAM, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORDS.--October 1980 to current year.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT 1987												
23...	1345	227	618	8.22	19.0	21.5	1.2	700	8.5	105	18	K5
NOV												
24...	1400	345	551	7.65	21.5	13.0	0.50	710	10.0	102	11	K3
DEC												
15...	1530	346	600	7.00	12.0	9.0	0.50	710	10.8	101	45	K1
JAN 1988												
26...	1320	479	456	8.64	20.5	9.0	5.6	713	11.2	104	<10	K2
FEB												
24...	1500	414	460	7.50	24.0	14.0	2.8	710	9.5	99	18	K1
MAR												
29...	1515	209	618	8.30	21.0	17.0	0.80	707	--	--	78	K4
APR												
26...	1445	7850	143	7.75	28.0	15.0	110	703	9.8	106	16	67
MAY												
25...	1330	166	590	8.10	34.0	24.0	3.4	710	8.5	109	17	K13
JUN												
28...	1600	140	720	8.00	29.0	26.0	1.2	705	7.8	105	<10	K5
JUL												
26...	1430	140	673	8.15	38.0	29.0	32	708	7.5	106	15	20
AUG												
25...	1500	315	600	8.10	30.0	30.0	26	705	6.9	89	<10	300
SEP												
27...	1520	183	688	7.60	34.0	24.0	7.4	706	--	--	<10	K9

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT 1987												
23...	64	260	46	45	35	43	1	2.8	283	0	0	232
NOV												
24...	K8	270	28	55	32	33	0.9	2.4	315	0	0	258
DEC												
15...	K2	270	16	56	32	22	0.6	2.5	317	0	0	260
JAN 1988												
26...	60	220	12	47	25	23	0.7	2.3	225	12	0	204
FEB												
24...	K14	230	8	50	25	25	0.7	2.0	292	0	0	239
MAR												
29...	45	270	22	54	32	34	0.9	2.3	293	2	0	243
APR												
26...	300	71	0	18	6.2	4.2	0.2	1.2	82	0	0	67
MAY												
25...	K5	260	38	48	33	39	1	2.8	--	--	0	--
JUN												
28...	K16	270	45	46	37	47	1	3.4	272	0	0	223
JUL												
26...	42	270	52	47	37	48	1	3.3	268	0	0	220
AUG												
25...	190	240	28	39	35	39	1	2.8	269	0	0	220
SEP												
27...	K8	270	50	47	36	43	1	3.0	290	0	0	238

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09508500 VERDE RIVER BELOW TANGLE CREEK ABOVE HORSESHOE DAM, AZ--Continued

WATER QUALITY DATA

DATE	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS- PENDED (MG/L) (00530)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
OCT 1987 23...	68	25	0.30	23	346	370	0.47	2	<0.010	<0.100	<0.100
NOV 24...	57	21	0.30	--	360	345	0.49	5	--	<0.100	--
DEC 15...	56	19	0.40	21	364	363	0.50	1	<0.010	<0.100	<0.100
JAN 1988 26...	34	13	0.30	--	283	270	0.38	4	--	<0.100	--
FEB 24...	38	13	0.30	20	299	307	0.41	7	0.020	<0.100	<0.100
MAR 29...	60	19	0.40	--	374	349	0.51	4	--	<0.100	--
APR 26...	16	2.6	0.10	15	111	117	0.15	696	--	<0.100	--
MAY 25...	77	22	0.40	--	350	353	0.48	12	--	<0.100	--
JUN 28...	94	28	0.30	26	412	415	0.56	8	<0.010	<0.100	<0.100
JUL 26...	86	27	0.30	--	408	380	0.55	8	--	<0.100	--
AUG 25...	70	22	0.30	24	347	362	0.47	57	<0.010	<0.100	<0.100
SEP 27...	74	25	0.30	--	379	358	0.52	16	--	<0.100	--

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	PHOS- PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS- PHOROUS ORGANIC DIS- SOLVED (MG/L AS P) (00673)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)
OCT 1987 23...	<0.010	0.020	--	0.20	0.010	<0.010	0.020	0.06	0.01	--	<10
NOV 24...	<0.010	--	--	0.20	0.010	--	--	--	0.01	--	--
DEC 15...	<0.040	0.020	--	0.70	0.010	0.020	0.010	0.03	0.01	0.01	--
JAN 1988 26...	0.010	--	--	--	--	--	--	--	--	--	--
FEB 24...	<0.010	0.010	--	<0.20	0.020	0.020	0.010	0.03	0.02	0.01	20
MAR 29...	<0.010	--	--	0.20	0.020	--	--	--	0.02	--	--
APR 26...	0.040	--	0.96	1.0	0.260	0.060	--	--	0.26	0.06	210
MAY 25...	<0.010	--	--	0.20	0.020	--	--	--	0.02	--	--
JUN 28...	<0.010	0.020	--	0.40	0.030	0.010	<0.010	--	0.03	0.01	--
JUL 26...	0.040	--	0.36	0.40	0.030	--	--	--	0.03	--	--
AUG 25...	<0.010	<0.010	--	0.50	0.110	0.010	<0.010	--	0.11	0.01	<10
SEP 27...	<0.010	--	--	0.40	0.030	--	--	--	0.03	--	--

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)
OCT 1987 23...	19	19	71	<0.5	200	<1	<1	<1	1	<3	6
NOV 24...	18	18	85	--	150	<1	<1	2	2	--	8
DEC 15...	18	17	84	--	150	1	<1	3	2	--	6
JAN 1988 26...	14	14	<100	--	100	2	1	3	<1	--	7
FEB 24...	17	14	80	<0.5	120	1	<1	2	<1	<3	7
MAR 29...	20	18	81	--	160	<1	<1	<1	2	--	5
APR 26...	9	4	29	<0.5	20	4	<1	*33	<1	<3	70
MAY 25...	20	19	77	--	180	<1	<1	<1	1	--	4
JUN 28...	20	22	77	--	220	1	<1	3	1	--	11
JUL 26...	24	21	68	--	200	<1	1	3	<1	--	6
AUG 25...	22	18	67	<0.5	190	<1	<1	5	<1	<3	29
SEP 27...	20	22	81	--	200	<1	<1	3	2	--	7

* Value verified.
< Actual value is known to be less than value shown.

09508500 VERDE RIVER BELOW TANGLE CREEK ABOVE HORSESHOE DAM, AZ--Continued

WATER QUALITY DATA

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)
OCT 1987											
23...	3	160	16	<5	<5	42	20	4	<0.10	0.1	<10
NOV											
24...	9	160	14	<5	<5	--	10	6	<0.10	--	--
DEC											
15...	5	60	6	<5	<5	--	<10	3	<0.10	--	--
JAN 1988											
26...	8	420	20	<5	<5	--	10	10	--	--	--
FEB											
24...	4	430	16	<5	<5	29	10	8	<0.10	<0.1	<10
MAR											
29...	3	170	8	<5	<5	--	<10	3	<0.10	--	--
APR											
26...	11	2100	170	*59	<5	5	*640	7	0.20	<0.1	<10
MAY											
25...	3	340	3	<5	<5	--	20	2	<0.10	--	--
JUN											
28...	3	230	5	<5	<5	--	50	2	<0.10	--	--
JUL											
26...	4	360	<3	<5	<5	--	40	7	0.10	--	--
AUG											
25...	1	1800	3	<5	<5	39	60	3	0.10	<0.1	<10
SEP											
27...	2	430	10	<5	<5	--	30	9	0.10	--	--

DATE	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 1987											
23...	2	<1	<1	<1.0	830	6	10	7	73	6	3.7
NOV											
24...	--	<1	<1	<1.0	--	--	<10	8	78	3	2.8
DEC											
15...	--	<1	<1	1.0	--	--	<10	6	52	1	0.93
JAN 1988											
26...	--	<1	<1	<1.0	--	--	<10	<10	78	11	14
FEB											
24...	3	1	1	<1.0	520	<6	20	9	84	13	15
MAR											
29...	--	<1	<1	1.0	--	--	<10	<3	82	4	2.3
APR											
26...	3	<1	<1	<1.0	140	<6	*130	10	56	675	14300
MAY											
25...	--	1	1	1.0	--	--	<10	4	85	15	6.7
JUN											
28...	--	<1	<1	<1.0	--	--	10	5	96	9	3.4
JUL											
26...	--	<1	<1	<1.0	--	--	10	6	95	13	4.9
AUG											
25...	2	<1	<1	<1.0	870	9	<10	<3	--	--	--
SEP											
27...	--	<1	<1	<1.0	--	--	*20	11	98	19	9.4

* Value verified.
< Actual value is known to be less than value shown.

09509500 RESERVOIR SYSTEM ON VERDE RIVER AT AND BELOW HORSESHOE DAM, AZ

LOCATION.--This system comprises two storage reservoirs created by Horseshoe and Bartlett Dams on Verde River, Hydrologic Unit 15060203. Gages on Horseshoe Reservoir, formed by Horseshoe Dam, lat 33°59'05", long 111°42'35", in sec.2, T.7 N., R.6 E. (unsurveyed); and Bartlett Reservoir, formed by Bartlett Dam, lat 33°49'05", long 111°37'52", in sec.34, T.6 N., R.7 E. (unsurveyed).

DRAINAGE AREA.--6,185 mi^2, at Bartlett Dam.

PERIOD OF RECORD.--July 1939 to current year. Prior to 1946 published as Bartlett Reservoir at Bartlett Dam.

REVISED RECORDS.--WSP 1283: Drainage area.

GAGE.--Water-stage recorders on dam structures. Datum of gage on Horseshoe Reservoir is 1,900.00 ft and on Bartlett Reservoir 1,599.46 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 14, 1964, Bartlett Reservoir gage datum was 10.00 ft higher.

REMARKS.--Horseshoe Reservoir is formed by earthfill and rockfill dam; dam completed and storage began Nov. 15, 1945. Bartlett Reservoir is formed by concrete multiple-arch dam; dam completed May 1939 and storage began Feb. 5, 1939. Total capacity of the two reservoirs (capacity tables dated 1978, based on survey in 1977-78) is 309,600 acre-ft divided as follows: Horseshoe Reservoir, 131,400 acre-ft between elevations 1,915.0 ft - sill of outlet gage - and 2,026.0 ft - top of spillway gates; Bartlett Reservoir, 178,200 acre-ft between elevations 1,619.46 ft - 10 ft above sill of outlet gates - and 1,797.46 ft - top of spillway gates. No dead storage. Records given herein represent usable contents. Water is used for irrigation of Salt River Valley and for municipal supply.

COOPERATION.--Capacity tables furnished by Salt River Valley Water Users' Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents of system, 318,000 acre-ft May 9, 1973; no storage at times when natural flow of river was passed through reservoir system.

EXTREMES FOR CURRENT YEAR.--Maximum contents of system, 304,000 acre-ft Apr. 29; minimum, 167,000 acre-ft Oct. 28-30.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203000	173000	206000	199000	210000	255000	261000	301000	273000	239000	206000	207000
2	201000	191000	206000	199000	211000	259000	261000	300000	273000	238000	206000	208000
3	199000	197000	205000	199000	228000	261000	260000	299000	272000	238000	206000	209000
4	197000	199000	205000	198000	236000	263000	260000	299000	271000	238000	206000	210000
5	194000	200000	206000	198000	240000	264000	259000	299000	270000	237000	206000	210000
6	192000	201000	206000	198000	241000	266000	259000	298000	270000	236000	206000	211000
7	189000	205000	206000	198000	242000	267000	258000	298000	268000	235000	206000	211000
8	186000	208000	206000	198000	242000	268000	258000	297000	267000	234000	205000	211000
9	184000	210000	206000	198000	242000	269000	257000	297000	266000	233000	204000	212000
10	183000	210000	206000	198000	243000	269000	256000	296000	265000	231000	203000	212000
11	181000	210000	206000	198000	243000	270000	256000	295000	264000	230000	202000	212000
12	180000	209000	205000	198000	243000	270000	255000	294000	263000	229000	201000	212000
13	179000	209000	204000	197000	243000	271000	254000	293000	262000	227000	200000	212000
14	178000	209000	203000	197000	243000	271000	253000	291000	261000	226000	198000	212000
15	177000	209000	202000	197000	243000	270000	251000	290000	260000	225000	197000	212000
16	177000	209000	201000	197000	243000	270000	250000	289000	259000	223000	196000	212000
17	176000	209000	201000	197000	241000	269000	250000	288000	258000	222000	195000	212000
18	175000	208000	202000	201000	241000	269000	250000	286000	256000	220000	194000	212000
19	174000	208000	202000	204000	240000	268000	251000	285000	255000	219000	192000	212000
20	173000	207000	202000	205000	239000	268000	255000	284000	254000	217000	191000	212000
21	172000	207000	202000	206000	238000	267000	257000	282000	253000	216000	191000	212000
22	171000	207000	202000	206000	238000	267000	261000	281000	252000	216000	191000	212000
23	170000	207000	202000	206000	239000	267000	274000	280000	250000	215000	191000	212000
24	170000	207000	202000	207000	239000	266000	286000	279000	248000	214000	192000	212000
25	169000	207000	201000	207000	240000	266000	294000	278000	247000	213000	192000	212000
26	168000	207000	201000	207000	241000	265000	299000	277000	245000	212000	192000	212000
27	168000	207000	201000	208000	242000	265000	302000	277000	244000	211000	193000	212000
28	167000	207000	200000	208000	246000	264000	303000	276000	242000	210000	195000	211000
29	167000	207000	200000	209000	251000	263000	304000	276000	241000	208000	199000	211000
30	167000	207000	199000	209000	---	263000	302000	275000	240000	207000	202000	210000
31	168000	---	199000	210000	---	262000	---	274000	---	207000	204000	---
MAX	203000	210000	206000	210000	251000	271000	304000	301000	273000	239000	206000	212000
MIN	167000	173000	199000	197000	210000	255000	250000	274000	240000	207000	191000	207000
(*)	-36000	+39000	-8000	+11000	+41000	+11000	+40000	-28000	-34000	-33000	-3000	+6000

CAL YR 1987 MAX 309000 MIN 167000 (*) -3000
WTR YR 1988 MAX 304000 MIN 167000 (*) +6000

(*) Change in contents, in acre-feet.

09510000 VERDE RIVER BELOW BARTLETT DAM, AZ

LOCATION.--Lat 33°48'30", long 111°39'46", in NW¼ sec.5, T.5 N., R.7 E. (unsurveyed), Maricopa County, Hydrologic Unit 15060203, in Tonto National Forest, on right bank 2.1 mi downstream from Bartlett Dam, 4.0 mi upstream from Camp Creek, and 16 mi east of town of Cave Creek.

DRAINAGE AREA.--6,188 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1888 to current year. (Monthly discharge only August 1888 to December 1903, and January 1910 to September 1913. For some periods prior to December 1903 gage heights, discharge measurements, and daily discharge hydrograph are published in reports of the Geological Survey.) Prior to October 1941, published under different names as follows: "near Fort McDowell," "at mouth," "above Salt River," "at McDowell," "at McDowell near Lehi," "near McDowell," and "above Camp Creek, near McDowell."

REVISED RECORDS.--WSP 1049: 1893, 1913-14, 1917-18, 1926-27, 1929. WSP 1213: 1915-16. WSP 1283: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,572.34 ft above National Geodetic Vertical Datum of 1929. Gage at present site and datum Jan. 1, 1942, to Sept. 30, 1961, Dec. 30, 1965, to Mar. 10, 1971, and Oct. 1, 1978, to the present; Mar. 2 to Sept. 30, 1978, used as supplementary gage, and Feb. 18, 1975, to Feb. 28, 1978, supplementary water-stage recorder at site 30 ft upstream at same datum. Oct. 1, 1961, to Dec. 29, 1965, and Mar. 11, 1971, to Sept. 30, 1973, water-stage recorder at site 1.9 mi upstream at datum 1,600 ft, from topographic map; at same site at datum 2.00 ft higher, Oct. 1, 1973, to Mar. 3, 1975, and 3.00 ft higher, Oct. 1, 1961, to Dec. 29, 1965, and Mar. 11, 1971, to Sept. 30, 1973. Feb. 17, 1925, to Dec. 31, 1941, water-stage recorder at two sites within 0.5 mi upstream from Camp Creek, at various datums. Prior to Feb. 17, 1925, nonrecording gages at several sites about 20 mi downstream from present location at various datums.

REMARKS.--Records good except for estimated daily discharges, which are fair. About 12,500 acres above station are irrigated by surface water and ground water. Flow completely regulated by Bartlett Reservoir since Feb. 5, 1939, and Horseshoe Reservoir since Nov. 15, 1945 (see preceding page), except during periods of spill. Water diverted downstream for municipal supply of city of Phoenix, and for irrigation in Fort McDowell Indian Reservation. Remainder (except during infrequent periods of extreme flooding) is diverted at Granite Reef Dam on Salt River 27 mi downstream for irrigation in Salt River Valley, and for municipal use by the city of Phoenix.

AVERAGE DISCHARGE (adjusted for storage in Bartlett and Horseshoe Reservoirs).--100 years, 677 ft^3/s, 490,500 acre-ft/yr; median of yearly mean discharge, 540 ft^3/s, 391,000 acre-ft/ yr.

EXTREMES FOR PERIOD OF RECORD.--1888-1939: Maximum discharge not determined, probably over 150,000 ft^3/s Feb. 24, 1891; minimum daily, 29 ft^3/s July 11, 13, 1901. Floods of Nov. 27, 1905, and Mar. 4, 1938, reached maximum discharges of 96,000 ft^3/s and 95,000 ft^3/s, respectively.

1939-88: Maximum discharge, 101,000 ft^3/s Mar. 2, 1978; no flow at Bartlett Dam at times when gates in dam were closed.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 5,220 ft^3/s Apr. 26; minimum daily, 97 ft^3/s Sept. 1, 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	735	342	421	446	599	209	482	1670	548	640	382	97
2	1050	266	435	407	567	210	483	1260	548	612	300	97
3	1250	282	514	411	481	209	478	724	548	308	328	98
4	1350	413	436	494	464	209	478	724	546	304	462	98
5	1370	395	293	511	553	208	479	588	547	400	463	99
6	1340	365	214	500	624	208	479	500	567	549	437	99
7	1320	496	283	470	655	208	480	500	625	615	398	99
8	1340	475	377	425	646	207	480	500	625	759	504	101
9	982	467	399	393	727	207	480	570	652	753	636	100
10	796	669	391	407	776	207	479	724	712	720	694	100
11	715	643	347	482	852	207	480	794	639	698	708	101
12	633	626	542	506	883	207	481	787	560	725	771	104
13	617	455	692	507	904	206	698	787	556	788	805	104
14	643	375	815	504	864	290	841	787	580	784	770	105
15	681	389	856	464	845	493	840	787	644	783	701	106
16	679	421	769	400	949	495	728	780	670	842	653	103
17	657	428	590	274	1170	496	472	780	732	849	657	103
18	635	420	470	222	1130	493	e472	780	676	791	767	105
19	637	476	417	206	1140	493	e358	780	604	648	778	105
20	687	483	360	161	1060	494	280	787	617	603	669	105
21	727	420	447	324	1030	494	280	787	772	603	493	107
22	729	373	422	423	506	493	280	787	800	513	345	110
23	767	394	319	372	219	491	525	787	890	481	291	110
24	629	435	315	393	212	488	1210	787	987	538	219	109
25	572	407	461	417	209	488	3930	637	881	603	243	109
26	611	389	580	352	209	489	5220	258	819	663	212	236
27	601	374	560	387	209	489	3210	370	810	765	207	331
28	535	351	530	464	210	485	2240	350	823	733	202	331
29	438	379	540	555	209	481	1780	345	860	829	200	336
30	440	384	593	578	---	482	1890	380	690	783	159	338
31	430	---	497	584	---	481	---	500	---	495	102	---
TOTAL	24596	12792	14885	13039	18902	11317	31013	21597	20530	20177	14556	4146
MEAN	793	426	480	421	652	365	1034	697	684	651	470	138
MAX	1370	669	856	584	1170	496	5220	1670	987	849	805	338
MIN	430	266	214	161	209	206	280	258	547	304	102	97
AC-FT	48790	25370	29520	25860	37490	22450	61510	42840	40720	40020	28870	8220

CAL YR 1987 TOTAL 174496 MEAN 478 MAX 2810 MIN 86 AC-FT 346100
WTR YR 1988 TOTAL 207550 MEAN 567 MAX 5220 MIN 97 AC-FT 411700

e Estimated

09510000 VERDE RIVER BELOW BARTLETT DAM, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to December 1981, March 1982 to September 1982, April 1983 to current year.
WATER TEMPERATURES: December 1950 to December 1981, March 1982 to September 1982, April 1983 to current year.

REMARKS.--Unpublished daily specific conductance measurements for period December 1950 to September 1964 available from district office in Tucson, Ariz.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily observed, 958 microsiemens Nov. 10, 1956; minimum daily observed, 160 microsiemens Feb. 29, 1980.
WATER TEMPERATURES: Maximum daily observed, 32.0°C July 18, Aug. 14, 1951; minimum daily observed, 5.0°C Jan. 30, 1952.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum daily observed, 490 microsiemens Feb. 25; minimum daily observed, 321 microsiemens Aug. 7.
WATER TEMPERATURES: Maximum daily observed, 27.0°C on many days during Aug. and Sept.; minimum daily observed, 10.0°C on many days during Jan., Feb., and Mar.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)
OCT 1987											
21...	1200	722	415	8.12	26.5	23.0	22	718	9.3	116	<10
NOV											
19...	1025	467	450	8.52	15.0	17.0	9.7	731	8.5	92	16
DEC											
16...	1205	772	498	8.58	12.0	14.5	4.2	722	10.4	108	35
JAN 1988											
26...	1030	345	453	8.21	20.0	11.0	5.0	728	11.8	112	14
FEB											
23...	1020	221	455	8.50	20.0	11.0	3.0	723	11.2	107	17
MAR											
22...	1035	494	468	8.55	20.5	12.0	5.5	721	11.8	116	99
APR											
27...	1245	3570	420	8.47	29.0	17.0	1.3	718	9.3	102	28
MAY											
26...	1145	232	422	8.56	32.0	15.5	4.8	718	12.5	133	<10
JUN											
22...	1230	772	400	8.40	37.5	17.5	6.0	715	--	--	20
JUL											
26...	1125	606	350	8.36	29.5	19.0	6.6	721	9.5	108	25
AUG											
23...	1105	220	382	8.40	32.0	29.0	1.8	725	7.7	105	14
SEP											
29...	1115	345	395	8.20	31.5	25.0	2.3	720	7.6	98	16

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
OCT 1987										
21...	K9	140	180	7	35	23	24	0.8	2.5	217
NOV										
19...	K10	K16	190	17	36	25	27	0.9	2.5	200
DEC										
16...	K3	K15	190	13	36	25	27	0.9	2.7	220
JAN 1988										
26...	<1	K16	200	9	37	25	27	0.9	2.8	214
FEB										
23...	<1	K11	200	9	39	24	25	0.8	2.4	214
MAR										
22...	<1	K11	190	10	38	23	24	0.8	2.4	200
APR										
27...	K2	K10	180	10	37	22	22	0.7	2.1	199
MAY										
26...	K1	K3	180	11	37	22	22	0.7	2.1	198
JUN										
22...	<1	K8	170	4	35	19	19	0.7	2.0	182
JUL										
26...	K18	K14	160	9	34	18	16	0.6	1.8	178
AUG										
23...	K1	56	160	8	31	20	20	0.7	2.1	184
SEP										
29...	--	--	170	9	32	21	22	0.8	2.3	182

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09510000 VERDE RIVER BELOW BARTLETT DAM, AZ--Continued

WATER QUALITY DATA

DATE	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HYDROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
OCT 1987										
21...	0	0	178	35	14	0.30	253	239	0.34	3
NOV										
19...	10	0	180	46	22	0.30	267	265	0.36	12
DEC										
16...	1	0	182	51	17	0.40	273	267	0.37	3
JAN 1988										
26...	4	0	182	43	15	0.30	272	262	0.37	6
FEB										
23...	4	0	182	42	14	0.30	274	259	0.37	6
MAR										
22...	5	0	172	49	13	0.30	266	258	0.36	9
APR										
27...	2	0	166	35	12	0.30	252	234	0.34	4
MAY										
26...	2	0	166	38	13	0.30	250	238	0.34	6
JUN										
22...	1	0	151	29	10	0.50	239	212	0.33	17
JUL										
26...	1	0	148	26	9.8	0.20	207	196	0.28	6
AUG										
23...	5	0	159	32	11	0.20	247	208	0.34	<1
SEP										
29...	1	0	151	34	12	0.20	232	218	0.32	1

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHCROUS ORGANIC TOTAL (MG/L AS P) (00670)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BORON, DISSOLVED (UG/L AS B) (01020)
OCT 1987										
21...	<0.100	0.050	0.35	0.40	0.040	0.04	14	14	51	120
NOV										
19...	<0.100	0.060	0.24	0.30	0.050	0.05	13	12	49	120
DEC										
16...	<0.100	0.010	0.19	0.20	0.030	0.03	12	14	49	120
JAN 1988										
26...	0.100	0.050	--	<0.20	0.030	0.03	13	13	49	120
FEB										
23...	<0.100	0.010	0.19	0.20	0.030	0.03	11	11	50	110
MAR										
22...	<0.100	0.010	0.19	0.20	0.030	0.03	11	11	50	110
APR										
27...	<0.100	<0.010	--	<0.20	0.020	0.02	12	11	50	100
MAY										
26...	<0.100	0.010	0.39	0.40	0.030	0.03	12	13	48	100
JUN										
22...	<0.100	0.020	0.68	0.70	0.040	0.04	11	11	47	80
JUL										
26...	<0.100	<0.010	--	0.50	0.040	0.04	11	11	47	70
AUG										
23...	<0.100	0.070	1.0	1.1	0.040	0.04	13	11	45	90
SEP										
29...	<0.100	<0.010	--	0.60	0.010	0.01	12	13	48	100

< Actual value is known to be less than value shown.

09510000 VERDE RIVER BELOW BARTLETT DAM, AZ--Continued

WATER QUALITY DATA

DATE	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
OCT 1987										
21...	<1	<1	<1	1	7	6	270	4	6	6
NOV										
19...	<1	<1	2	1	10	6	680	11	7	<5
DEC										
16...	1	<1	4	1	6	5	480	<10	<5	<5
JAN 1988										
26...	1	<1	1	1	7	3	300	7	<5	<5
FEB										
23...	1	<1	1	1	7	5	310	19	<5	<5
MAR										
22...	<1	<1	3	<1	6	6	350	12	<5	<5
APR										
27...	1	<1	4	<1	7	5	150	6	12	<5
MAY										
26...	<1	<1	2	<1	3	2	440	10	<5	<5
JUN										
22...	<1	<1	3	<1	8	3	350	14	16	<5
JUL										
26...	<1	<1	4	<1	6	3	390	25	7	<5
AUG										
23...	1	<1	<1	2	2	4	40	9	<5	<5
SEP										
29...	<1	<1	<1	<1	3	3	270	6	<5	<5

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC DIS- SOLVED (UG/L AS ZN) (01090)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 1987										
21...	160	110	<0.10	<1	<1	<1.0	<10	7	8	16
NOV										
19...	40	4	<0.10	<1	<1	<1.0	<10	10	20	25
DEC										
16...	30	<1	<0.10	<1	<1	<6.0	<10	<3	7	15
JAN 1988										
26...	20	4	<0.10	<1	<1	<1.0	<10	<3	7	6.5
FEB										
23...	20	7	<0.10	<1	<1	<1.0	10	8	8	4.8
MAR										
22...	30	13	<0.10	<1	<1	<1.0	20	13	9	12
APR										
27...	<10	1	<0.10	<1	<1	<1.0	<10	<3	4	39
MAY										
26...	20	5	<0.10	<1	<1	<1.0	20	8	6	3.8
JUN										
22...	40	14	<0.10	<1	<1	<1.0	<10	3	7	15
JUL										
26...	50	26	<0.10	<1	<1	<1.0	<10	4	6	9.8
AUG										
23...	10	10	<0.10	<1	<1	<1.0	<10	7	1	0.59
SEP										
29...	50	4	<0.10	<1	<1	<1.0	<10	6	11	10

< Actual value is known to be less than value shown.

09510000 VERDE RIVER BELOW BARTLETT DAM, AZ--Continued

SPECIFIC CONDUCTANCE, US/CM @ 25 DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	378	450	455	457	450	472	434	430	360	---	361	385
2	375	445	460	462	464	451	421	430	380	360	360	444
3	415	445	450	464	461	410	410	429	379	370	339	398
4	421	448	445	471	460	422	440	421	391	354	348	390
5	422	449	468	461	452	418	414	392	410	370	330	387
6	425	450	468	460	450	413	434	381	407	331	341	390
7	425	446	453	451	440	410	441	380	416	380	321	390
8	426	473	467	460	450	413	424	380	400	382	381	401
9	430	474	460	460	441	410	424	430	390	340	381	390
10	427	481	441	440	441	419	410	393	371	362	361	398
11	429	480	462	470	450	420	451	400	412	354	391	409
12	429	489	460	460	440	412	440	400	408	335	382	409
13	426	487	458	450	460	431	441	410	390	350	387	408
14	431	452	421	462	440	421	449	410	411	371	381	410
15	428	448	469	474	461	432	441	421	411	370	387	409
16	432	460	442	475	462	410	410	430	412	360	391	405
17	419	452	460	460	451	420	431	440	398	369	389	410
18	415	450	432	463	461	410	450	441	411	369	389	410
19	412	440	438	480	440	430	439	435	400	370	390	410
20	417	450	430	470	483	412	390	410	418	370	390	411
21	421	455	425	461	488	413	410	432	411	360	390	410
22	428	455	441	462	489	410	450	420	389	370	390	409
23	449	446	440	450	463	410	434	430	409	360	399	409
24	461	457	454	474	471	420	430	430	408	360	399	410
25	467	453	430	461	490	385	432	422	412	362	391	410
26	467	453	470	460	484	404	432	422	412	360	391	410
27	452	455	472	450	470	466	434	430	363	369	399	410
28	468	458	470	470	462	422	439	430	368	360	391	---
29	461	457	469	451	461	440	440	429	363	361	391	411
30	---	458	441	450	---	450	438	429	---	361	398	410
31	---	---	460	460	---	432	---	427	---	361	391	---
MAX	---	489	472	480	490	472	451	441	---	---	399	---
MIN	---	440	421	440	440	385	390	380	---	---	321	---

WATER TEMPERATURE, DEGREES CENTIGRADE, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
INSTANTANEOUS VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20.0	20.0	16.0	13.0	10.0	10.0	11.0	17.0	14.0	---	21.0	27.0
2	20.0	20.0	16.0	12.0	10.0	10.0	11.0	17.0	14.0	16.0	21.0	27.0
3	25.0	20.0	15.0	12.0	10.0	10.0	11.0	15.0	14.0	16.0	21.0	27.0
4	25.0	20.0	15.0	11.0	10.0	10.0	11.0	15.0	14.0	16.0	21.0	27.0
5	25.0	20.0	15.0	11.0	10.0	12.0	11.0	12.0	14.0	16.0	21.0	27.0
6	25.0	19.0	15.0	11.0	10.0	12.0	11.0	12.0	14.0	16.0	21.0	27.0
7	25.0	20.0	15.0	11.0	10.0	12.0	11.0	12.0	14.0	16.0	21.0	27.0
8	25.0	19.0	15.0	11.0	10.0	12.0	11.0	12.0	14.0	16.0	27.0	27.0
9	25.0	19.0	15.0	11.0	10.0	12.0	11.0	12.0	14.0	18.0	27.0	26.0
10	25.0	19.0	15.0	11.0	10.0	12.0	11.0	12.0	14.0	18.0	27.0	26.0
11	25.0	19.0	15.0	11.0	10.0	12.0	11.0	12.0	14.0	18.0	26.0	26.0
12	25.0	19.0	15.0	11.0	10.0	13.0	11.0	12.0	15.0	18.0	26.0	26.0
13	25.0	19.0	15.0	11.0	10.0	13.0	11.0	12.0	15.0	18.0	26.0	26.0
14	24.0	19.0	14.0	11.0	10.0	13.0	11.0	13.0	15.0	17.0	26.0	26.0
15	24.0	19.0	14.0	11.0	10.0	13.0	11.0	13.0	15.0	17.0	26.0	26.0
16	22.0	19.0	14.0	11.0	10.0	13.0	12.0	13.0	15.0	17.0	26.0	26.0
17	22.0	19.0	14.0	11.0	10.0	13.0	12.0	13.0	15.0	17.0	27.0	26.0
18	22.0	19.0	14.0	10.0	10.0	13.0	12.0	13.0	15.0	17.0	27.0	26.0
19	22.0	19.0	13.0	10.0	10.0	11.0	12.0	13.0	15.0	17.0	26.0	26.0
20	22.0	19.0	13.0	10.0	12.0	11.0	12.0	13.0	15.0	17.0	27.0	26.0
21	22.0	18.0	13.0	10.0	12.0	11.0	12.0	13.0	15.0	17.0	27.0	26.0
22	22.0	18.0	13.0	10.0	12.0	11.0	12.0	13.0	15.0	17.0	26.0	26.0
23	22.0	17.0	13.0	10.0	12.0	11.0	12.0	13.0	15.0	18.0	27.0	26.0
24	21.0	17.0	13.0	10.0	12.0	11.0	13.0	13.0	15.0	18.0	27.0	26.0
25	21.0	16.0	13.0	10.0	12.0	11.0	13.0	13.0	15.0	18.0	27.0	22.0
26	21.0	16.0	13.0	10.0	12.0	11.0	17.0	13.0	15.0	18.0	---	22.0
27	21.0	16.0	13.0	10.0	10.0	11.0	17.0	13.0	20.0	18.0	27.0	22.0
28	21.0	16.0	13.0	10.0	10.0	11.0	17.0	14.0	20.0	18.0	27.0	---
29	21.0	17.0	13.0	10.0	10.0	11.0	17.0	14.0	20.0	19.0	27.0	22.0
30	---	16.0	13.0	10.0	---	11.0	17.0	14.0	---	19.0	27.0	23.0
31	---	---	13.0	10.0	---	11.0	---	14.0	---	19.0	27.0	---
MAX	---	20.0	16.0	13.0	12.0	13.0	17.0	17.0	---	---	---	---
MIN	---	16.0	13.0	10.0	10.0	10.0	11.0	12.0	---	---	---	---

09510200 SYCAMORE CREEK NEAR FORT MCDOWELL, AZ

LOCATION.--Lat 33°41'39", long 111°32'28", in sec.16, T.4 N., R.8 E. (unsurveyed), Maricopa County, Hydrologic Unit 15060203, in Tonto National Forest, on right bank 0.7 mi southwest of Sugarloaf Mountain, 9 mi northeast of Fort McDowell, 10 mi upstream from mouth, and 25 mi northeast of Scottsdale.

DRAINAGE AREA.--164 mi^2.

PERIOD OF RECORD.--December 1960 to current year. Prior to Oct. 1, 1963, published as "near McDowell."

REVISED RECORDS.--WRD Ariz. 1970: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Datum of gage is 1,759.33 ft above National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1970, at datum 0.16 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--27 years (water years 1962-88), 29.2 ft^3/s, 21,160 acre-ft/yr; median of yearly mean discharges, 13 ft^3/s, 9,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,200 ft^3/s Sept. 5, 1970, gage height, 19.7 ft, from profile past gage, from rating curve extended above 3,600 ft^3/s on basis of slope-area measurements at gage heights 15.0, 16.0, and 19.7 ft; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 18	1330	*1,410	*3.86
Feb. 3	1145	762	2.91

No flow for several days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	40	.27	.33	26	3.5	1.8	4.1	.61	.01	.01	2.0
2	.04	27	.32	.31	23	11	1.7	3.8	.40	.02	.01	.43
3	.05	3.0	.33	.32	286	4.8	1.7	3.6	.32	.01	.01	.19
4	.07	.79	.33	.34	160	3.5	1.5	3.3	.26	.01	.01	.14
5	.08	.40	.58	.34	89	3.2	1.3	3.0	.23	.01	.02	.08
6	.08	.46	.54	.46	57	3.1	1.3	2.8	.17	.01	.01	.08
7	.09	.31	.41	.34	41	3.0	1.3	2.7	.11	.01	.00	.08
8	.12	.22	.38	.34	31	2.8	1.3	2.8	.08	.01	.01	.10
9	.12	.12	.34	.31	22	2.7	1.3	2.7	.05	.01	.03	.10
10	.13	.08	.41	.32	16	2.7	1.1	2.6	.03	.01	.04	.10
11	.10	.07	.45	.34	14	2.7	1.1	2.2	.02	.01	.02	e.10
12	.06	.07	.61	.31	11	2.5	.98	2.0	.03	.01	.01	e.09
13	.07	.09	.63	.30	9.5	2.4	1.1	1.8	.03	.01	.01	e.09
14	.07	.13	e.80	.31	8.4	2.5	1.0	1.5	.03	.01	.00	e.08
15	.06	.14	e1.0	.31	7.9	2.5	1.1	1.3	.03	.01	.01	e.08
16	.05	.12	e1.0	.46	6.7	2.5	2.1	1.5	.03	.01	.01	e.07
17	.06	.14	e4.0	.49	6.2	2.5	1.6	1.5	.02	.01	.00	e.07
18	.05	.15	e1.2	331	5.6	2.4	1.7	1.4	.02	.01	.01	e.07
19	.05	.10	.52	163	5.6	2.3	1.4	1.4	.03	.01	13	e.07
20	.06	.11	.43	57	5.0	2.4	1.2	1.2	.04	.01	3.6	e.07
21	.06	.11	.38	28	4.6	2.3	1.9	1.1	.04	.02	15	e.06
22	.06	.19	.36	20	4.4	2.3	39	1.1	.04	.01	1.7	e.06
23	.16	.18	.34	19	4.2	2.3	102	.97	.04	.01	.17	e.06
24	.08	.19	.34	27	4.2	2.3	42	.95	.04	.01	.11	e.06
25	.07	.19	.34	31	4.0	2.2	22	.78	.04	.01	.07	e.06
26	.06	.18	.34	29	3.7	2.2	13	.50	.05	.01	.05	e.05
27	.07	.24	.34	40	4.0	2.2	8.7	.47	.05	.00	.07	e.05
28	.04	.26	.34	47	3.7	1.9	6.5	.40	.06	.00	.10	e.05
29	1.6	.20	.34	46	3.7	1.8	5.4	.42	.06	.00	.33	e.04
30	.15	.22	.33	43	---	1.8	4.5	.58	.05	.02	19	e.04
31	.18	---	.31	35	---	1.8	---	.80	---	.01	3.9	---
TOTAL	3.98	75.46	18.31	921.93	867.4	88.1	272.58	55.27	3.01	0.31	57.32	4.62
MEAN	.13	2.52	.59	29.7	29.9	2.84	9.09	1.78	.10	.010	1.85	.15
MAX	1.6	40	4.0	331	286	11	102	4.1	.61	.02	19	2.0
MIN	.04	.07	.27	.30	3.7	1.8	.98	.40	.02	.00	.00	.04
AC-FT	7.9	150	36	1830	1720	175	541	110	6.0	.6	114	9.2

CAL YR 1987 TOTAL 3182.59 MEAN 8.72 MAX 194 MIN .00 AC-FT 6310
WTR YR 1988 TOTAL 2368.29 MEAN 6.47 MAX 331 MIN .00 AC-FT 4700

e Estimated

09511300 VERDE RIVER NEAR SCOTTSDALE, AZ

LOCATION.--Lat 33'33'34", long 111°40'09", in NW¼NE¼SE¼ sec.31, T.3 N., R.7 E., Maricopa County, Hydrologic Unit 15060203, in Salt River Indian Reservation, on right bank, at downstream side of Verde Plant intake structure, 1.6 mi downstream from State Highway 87 (Beeline highway), 0.75 mi north of city of Phoenix water treatment plant, 1.1 mi upstream from mouth, and 16 mi northeast of Scottsdale.

DRAINAGE AREA.--6,600 mi^2, approximately.

PERIOD OF RECORD.--February 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,320.31 ft above National Geodetic Vertical Datum of 1929. Prior to October 1, 1980 at site 1.5 mi upstream on State Highway 87 bridge at datum 31.04 ft higher.

REMARKS.--Records good except for estimated daily discharges. which are fair. Flow regulated by Bartlett and Horseshoe Reservoirs (see sta 09509500) except during periods of spill or floodflow below Bartlett Dam. About 12,500 acres above reservoirs are irrigated by surface water and ground water. Below reservoirs water is diverted for municipal supply of city of Phoenix, and for irrigation of an undetermined acreage in Fort McDowell Indian Reservation. Remainder (except during infrequent period of extreme flooding) is diverted at Granite Reef Dam on Salt River, 6 mi downstream, for irrigation in Salt River Valley and for municipal use by the city of Phoenix.

AVERAGE DISCHARGE.--27 years, 655 ft^3/s, 474,500 acre-ft/yr; median of yearly mean discharges, 480 ft^3/s, 348,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 98,000 ft^3/s Feb. 16, 1980, on basis of flood routing, gage height, not determined; no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 4,620 ft^3/s Apr. 26; minimum daily, 72 ft^3/s Sept. 9, 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	552	645	370	e430	559	168	450	1990	468	650	e330	e110
2	727	329	432	e370	561	171	449	1610	475	657	e315	e90
3	1050	281	493	e360	514	171	454	847	471	389	e300	e89
4	1180	319	467	e410	416	168	454	699	468	287	e350	91
5	1280	383	363	e480	506	166	453	634	474	289	e415	88
6	1280	335	237	e490	568	164	449	469	480	469	e405	84
7	1250	354	234	e495	635	163	444	455	563	540	e395	81
8	1240	526	300	e450	601	160	449	460	581	701	e420	75
9	1100	415	356	e420	690	157	452	459	588	734	e500	72
10	776	558	354	e370	742	155	449	628	688	732	e590	73
11	709	673	325	e390	833	153	445	751	652	707	e640	78
12	614	646	362	e450	883	158	453	755	535	710	e685	73
13	579	548	621	459	941	162	548	748	517	787	e705	79
14	579	381	721	462	890	162	837	742	517	792	e700	80
15	611	365	806	451	864	376	841	753	623	791	e660	79
16	678	401	800	410	880	435	857	755	636	818	e640	77
17	643	425	691	323	1220	444	503	753	709	879	e620	76
18	621	403	508	301	1200	449	464	749	684	799	e685	74
19	606	440	450	269	1240	449	421	738	628	724	e740	73
20	637	448	345	205	1130	451	285	737	559	620	e760	74
21	689	438	e390	235	1100	451	284	725	719	622	e620	72
22	696	372	e400	375	837	446	295	730	746	578	e490	73
23	751	360	e395	357	254	448	328	734	830	463	e345	79
24	655	413	e300	352	209	447	877	735	956	509	e290	78
25	547	405	e350	376	176	445	2460	690	902	597	e240	76
26	576	367	e450	354	172	442	4620	340	796	598	e215	81
27	583	375	e545	324	171	445	3360	274	799	764	e215	220
28	545	338	e540	400	171	446	2620	307	784	701	e215	247
29	446	347	e495	476	169	442	2030	300	865	806	e200	249
30	400	355	e520	528	---	444	2120	291	737	876	e170	252
31	425	---	e560	534	---	446	---	394	---	616	e140	---
TOTAL	23025	12645	14180	12306	19132	9784	29151	21252	19450	20205	13995	3043
MEAN	743	421	457	397	660	316	972	686	648	652	451	101
MAX	1280	673	806	534	1240	451	4620	1990	956	879	760	252
MIN	400	281	234	205	169	153	284	274	468	287	140	72
AC-FT	45670	25080	28130	24410	37950	19410	57820	42150	38580	40080	27760	6040

CAL YR 1987 TOTAL 159236 MEAN 436 MAX 2290 MIN 75 AC-FT 315800
WTR YR 1988 TOTAL 198168 MEAN 541 MAX 4620 MIN 72 AC-FT 393100

e Estimated

GILA RIVER BASIN

09512200 SALT RIVER TRIBUTARY IN SOUTH MOUNTAIN PARK, AT PHOENIX, AZ

LOCATION.--Lat 33°20'49", long 112°05'03", in NE¼NE¼ sec.18, T.1 S., R.3 E., Maricopa County, Hydrologic Unit 15060106, in South Mountain Park, on left bank 6.5 mi south of Phoenix main post office.

DRAINAGE AREA.--1.75 mi^2.

PERIOD OF RECORD.--January 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,405.20 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. No storage or diversion above station.

AVERAGE DISCHARGE.--27 years, 0.008 ft^3/s, 5.8 acre-ft/yr; median of yearly mean discharges, 0.001 ft^3/s, 0.7 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 670 ft^3/s Sept. 4, 1965, gage height, 9.70 ft, from floodmark from rating curve extended above 31 ft^3/s on basis of measurements of peak flow through culvert at gage heigh 5.80, 9.09, and 9.52 ft; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 94 ft^3/s, Nov. 1, gage height 4.45 ft; no flow for entire year except that on Nov. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	2.5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.00	.083	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAX	.00	2.5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	5.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CAL YR 1987 TOTAL 2.50 MEAN .007 MAX 2.5 MIN .00 AC-FT 5.0
WTR YR 1988 TOTAL 2.50 MEAN .007 MAX 2.5 MIN .00 AC-FT 5.0

09512280 CAVE CREEK BELOW COTTONWOOD WASH NEAR CAVE CREEK, AZ

LOCATION.--Lat 33°53'14", long 111°57'12", in SE¼SE¼SW¼ sec.4, T.6 N., R.4 E., Maricopa County, Hydrologic Unit 15060106, on left bank 1,500 ft downstream from Cottonwood Creek and 3.7 mi north of town of Cave Creek.

DRAINAGE AREA.--82.7 mi^2.

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,280 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--8 years, 5.61 ft^3/s, 4,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,720 ft^3/s Nov. 30, 1982, gage height, 6.86 ft; no flow for many days most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 19, 1980, reached a stage of 10.4 ft, from flood marks, discharge, 7,020 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	0415	*840	*3.55

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	184	.92	1.1	1.3	1.0	.85	.63	.03	.00	.00	2.1
2	.00	24	.94	1.2	1.4	1.4	.85	.57	.02	.00	.00	.94
3	.00	6.6	1.0	1.3	3.5	1.2	.85	.57	.00	.00	.00	.34
4	.00	2.7	.87	1.3	5.4	1.1	.85	.52	.00	.00	.00	.16
5	.00	1.2	1.4	1.3	3.4	.93	.78	.49	.00	.00	.00	.02
6	.00	1.1	1.2	2.2	2.7	.92	.74	.45	.00	.00	.00	.00
7	.00	1.2	.99	1.9	2.2	.92	.72	.43	.00	.00	.00	.00
8	.00	.85	.88	1.5	1.7	.87	.68	.43	.00	.00	.00	.00
9	.00	.75	.92	1.3	1.4	.85	.64	.42	.00	.00	.00	.00
10	.00	.74	.92	1.3	1.4	.85	.60	.33	.00	.00	.00	.00
11	.00	.71	.95	1.2	1.3	.85	.59	.21	.00	.00	.00	.00
12	.00	.72	1.0	1.3	1.3	.85	.57	.16	.00	.00	.00	.00
13	.00	.67	1.0	1.3	1.3	.85	.57	.14	.00	.00	.00	.00
14	.00	.69	.97	1.3	1.2	.89	.56	.11	.00	.00	.00	.00
15	.00	.66	1.0	1.3	1.1	.92	.74	.11	.00	.00	.00	.00
16	.00	.61	1.0	1.8	1.1	.87	1.9	.11	.00	.00	.00	.00
17	.00	.63	3.6	2.6	1.1	.84	2.1	.09	.00	.00	.00	.00
18	.00	.65	30	193	1.0	.79	2.4	.08	.00	.00	.00	.00
19	.00	.65	11	58	1.0	.79	1.7	.07	.00	.00	.00	.00
20	.00	.65	5.6	17	1.0	.79	1.1	.06	.00	.00	.00	.00
21	.00	.67	3.6	8.5	1.0	.83	1.7	.06	.00	.00	65	.00
22	.00	.70	2.9	5.5	1.0	.85	10	.07	.00	.00	7.9	.00
23	.00	.72	2.3	4.0	1.0	.84	7.1	.08	.00	.00	.10	.00
24	.00	.71	1.9	3.3	1.0	.80	3.5	.08	.00	.00	.00	.00
25	.00	.74	1.6	2.9	1.0	.79	2.2	.08	.00	.00	28	.00
26	.00	.75	1.3	2.7	1.0	.78	1.5	.09	.00	.00	4.1	.00
27	.00	.74	1.2	2.5	1.1	.74	1.1	.08	.00	.00	58	.00
28	.00	.82	1.2	2.1	1.1	.73	.82	.07	.00	.00	16	.00
29	7.7	.87	1.3	1.8	1.1	.70	.74	.06	.00	.00	33	.00
30	18	.87	1.2	1.4	---	.73	.68	.06	.00	.00	8.4	.00
31	.89	---	1.1	1.3	---	.83	---	.04	---	.00	6.5	---
TOTAL	26.59	237.37	85.76	329.2	45.1	27.10	49.13	6.75	0.05	0.00	227.00	3.56
MEAN	.86	7.91	2.77	10.6	1.56	.87	1.64	.22	.002	.00	7.32	.12
MAX	18	184	30	193	5.4	1.4	10	.63	.03	.00	65	2.1
MIN	.00	.61	.87	1.1	1.0	.70	.56	.04	.00	.00	.00	.00
AC-FT	53	471	170	653	89	54	97	13	.1	.0	450	7.1

CAL YR 1987 TOTAL 838.11 MEAN 2.30 MAX 184 MIN .00 AC-FT 1660
WTR YR 1988 TOTAL 1037.61 MEAN 2.83 MAX 193 MIN .00 AC-FT 2060

09512400 CAVE CREEK AT PHOENIX, AZ

LOCATION.--Lat 33°34'56", long 112°06'43", in SW¼ sec.24, T.3 N., R.2 E., Maricopa County, Hydrologic Unit 15060106, on downstream side of bridge at Peoria Avenue in Phoenix, 0.7 mi upstream from Arizona Canal.

DRAINAGE AREA.--252 mi^2.

PERIOD OF RECORD.--October 1957 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,236.37 ft above National Geodetic Vertical Datum of 1929 (from Salt River Valley Water Users' Association temporary bench mark). Prior to July 31, 1974, at site 60 ft upstream at datum 6.93 ft higher.

REMARKS.--Records poor. Peak flow regulated from 161 mi^2 by Cave Creek Dam 12 mi upstream.

AVERAGE DISCHARGE.--31 years, 3.70 ft^3/s, 2,680 acre-ft/yr; median of yearly mean discharges, 1.1 ft^3/s, 800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,080 ft^3/s - including 345 ft^3/s released from Cave Creek Dam - Dec. 19, 1967, gage height, 11.23 ft, present datum; no flow for most of time each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,460 ft^3/s, Aug. 29, gage height, 7.61 ft (from flood marks inside well); no flow for most of the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	87	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e23
2	.00	142	.00	.00	.00	17	.00	.00	.00	.00	e.00	.00
3	.00	130	.00	.00	.00	e13	.00	.00	.00	.00	e.00	.00
4	.00	e46	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
5	.00	e.33	e1.5	.00	.00	.00	.00	.00	.00	.00	e.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
17	.00	.00	28	5.6	.00	.00	.00	.00	.00	e.00	e.00	.00
18	.00	.00	e26	e55	.00	.00	.00	.00	.00	e.00	e.00	.00
19	.00	.00	.00	e95	.00	.00	.00	.00	.00	e.00	e.00	.00
20	.00	.00	.00	e35	.00	.00	.00	.00	.00	e.00	e.00	.00
21	.00	.00	.00	e1.0	.00	.00	.00	.00	.00	e.00	e10	.00
22	.00	.00	.00	.00	.00	.00	25	.00	.00	e.00	e50	.00
23	e19	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e10	.00
24	e1.2	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e1.7	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e26	.00
29	43	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e230	.00
30	e9.7	.00	.00	.00	---	.00	.00	.00	.00	e.00	e95	.00
31	.00	---	.00	.00	---	.00	---	.00	---	e.00	141	---
TOTAL	72.90	405.33	55.50	191.60	0.00	30.00	25.00	0.00	0.00	0.00	563.70	23.00
MEAN	2.35	13.5	1.79	6.18	.00	.97	.83	.00	.00	.00	18.2	.77
MAX	43	142	28	95	.00	17	25	.00	.00	.00	230	23
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	145	804	110	380	.0	60	50	.0	.0	.0	1120	46

CAL YR 1987 TOTAL 637.73 MEAN 1.75 MAX 142 MIN .00 AC-FT 1260
WTR YR 1988 TOTAL 1367.03 MEAN 3.74 MAX 230 MIN .00 AC-FT 2710

e Estimated

09512500 AGUA FRIA RIVER NEAR MAYER, AZ

LOCATION.--Lat 34°18'55", long 112°03'48", in NW¼SE¼ sec.20, T.11 N., R.3 E., Yavapai County, Hydrologic Unit 15070102, on left bank at Sycamore damsite, 700 ft downstream from Big Bug Creek and 12 mi southeast of Mayer.

DRAINAGE AREA.--588 mi^2.

PERIOD OF RECORD.--January 1940 to current year.

GAGE.--Water-stage recorder. Datum of gage is 3,434 ft above National Geodetic Vertical Datum of 1929 (levels by Maricopa County Municipal Water Conservation District No. 1).

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions above station for mining and irrigation of about 600 acres.

AVERAGE DISCHARGE.--48 years, 22.8 ft^3/s, 16,520 acre-ft/yr; median of yearly mean discharges, 14 ft^3/s, 10,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,100 ft^3/s Feb. 19, 1980, from rating curve extended above 3,400 ft^3/s on basis of slope-area measurement of peak flow, gage height, 15.76 ft, from mean of surge, inside high-water mark 16.03 ft, floodmark 16.97 ft; negligible flow at times during the summer months in most previous years when entire flow was diverted to Perry Canal above station and flow past gage was seepage only.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	0745	10,200	9.48	Aug. 21	0515	2,530	5.90
Feb. 3	0430	5,220	7.42	Aug. 29	0330	*25,500	*13.98
Apr. 22	0515	3,370	6.44				

Minimum daily discharge, 0.24 ft^3/s Oct. 12-16.

REVISIONS.--Revised daily discharges, in cubic feet per second, for the period Sept. 20-30, 1987, are given below. These figures supersede those published in the report for 1987.

Sept. 20	0.54	Sept. 23	0.36	Sept. 26	0.48	Sept. 29	0.50
21	0.47	24	0.36	27	0.51	30	0.49
22	0.36	25	0.42	28	0.48		

	TOTAL	MEAN	MAX	MIN	AC-FT
September 1987	56.47	1.88	32	.25	112
Wtr Yr. 1987	4886.45	13.4	896	.00	9690

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.52	2840	9.7	4.1	5.4	e8.0	5.6	9.6	e2.1	e1.5	16	e64
2	.52	e175	9.3	3.8	5.1	e8.0	3.9	10	e2.1	e1.5	7.5	e9.6
3	.52	7.8	9.1	3.7	1190	e8.0	4.0	9.4	e2.1	e1.5	5.1	e8.5
4	.50	4.4	8.7	3.4	197	e8.0	4.0	8.8	e2.1	e1.5	e2.5	e7.0
5	.50	46	8.1	3.2	86	e8.0	4.0	7.7	e2.0	e1.5	e2.0	e7.0
6	.49	507	8.3	9.5	e26	e8.0	4.0	8.0	e1.9	e1.5	e2.0	e6.0
7	.41	233	8.2	14	e12	e8.0	4.1	6.8	e1.9	e1.5	e2.0	e6.0
8	.36	83	8.2	6.1	e9.0	e8.0	4.1	5.4	e1.9	e1.5	e1.5	e5.0
9	.36	58	7.3	4.8	e9.0	e8.0	4.1	4.8	e1.9	e1.5	e1.5	e5.0
10	.35	45	6.8	4.3	e8.0	e8.0	4.2	4.3	e1.9	e34	e1.5	e5.0
11	.28	39	6.4	3.7	e8.0	e8.0	4.2	4.1	e1.8	e20	e1.5	e5.0
12	.24	36	6.1	3.3	e8.0	e8.0	4.2	4.0	e1.7	e2.5	e1.3	e4.0
13	.24	29	5.7	3.3	e8.0	e8.0	4.2	4.0	e1.6	e2.0	e1.3	e4.0
14	.24	26	5.4	3.3	e8.0	e8.0	4.3	4.0	e1.6	e2.0	e1.3	e4.0
15	.24	22	5.2	2.9	e8.0	e8.0	4.5	4.0	e1.6	e1.0	e1.1	e4.0
16	.24	19	4.8	2.8	e8.0	7.7	5.2	3.8	e1.5	e1.0	e1.0	e4.0
17	.33	19	6.2	3.0	e8.0	7.7	5.0	3.6	e1.4	e.50	1.0	e4.0
18	.36	19	16	171	e8.0	7.7	5.1	3.4	e1.5	e.50	1.9	e4.0
19	.36	19	10	73	e8.0	7.7	4.9	3.2	e1.6	e.30	1.4	e4.0
20	.36	19	22	21	e8.0	7.7	4.8	3.1	e1.5	e.30	1.3	e4.0
21	.36	18	9.9	10	e8.0	7.6	132	2.9	e1.4	.54	396	e4.0
22	.36	17	7.0	6.9	e8.0	7.2	1270	2.9	e1.4	.49	e18	e3.9
23	.38	13	5.4	5.1	e8.0	7.0	336	2.8	e1.3	.60	e24	3.7
24	1.1	13	5.0	6.6	e8.0	6.7	188	2.7	e1.3	.77	e25	3.2
25	1.0	12	4.7	7.0	e8.0	6.4	92	2.7	e1.4	.84	e91	2.6
26	.95	12	4.4	5.2	e8.0	6.3	36	2.4	e1.4	.95	e17	2.7
27	.95	12	4.3	7.7	e8.0	6.3	20	2.3	e1.4	1.2	e122	2.7
28	.95	11	4.3	11	e8.0	6.3	15	2.2	e1.5	1.4	e66	2.7
29	34	11	4.4	16	e8.0	6.3	12	2.2	e1.5	19	e2700	2.7
30	30	10	4.4	16	---	6.4	10	e2.1	e3.3	16	e502	2.7
31	32	---	4.3	10	---	6.4	---	e2.1	---	2.1	e112	---
TOTAL	109.47	4375.2	229.6	445.5	1699.5	231.4	2199.4	139.3	51.6	121.29	4127.7	195.0
MEAN	3.53	146	7.41	14.4	58.6	7.46	73.3	4.49	1.72	3.91	133	6.50
MAX	34	2840	22	171	1190	8.0	1270	10	3.3	34	2700	64
MIN	.24	4.4	4.3	2.8	5.1	6.3	3.9	2.1	1.3	.30	1.0	2.6
AC-FT	217	8680	455	884	3370	459	4360	276	102	241	8190	387

CAL YR 1987 TOTAL 8092.22 MEAN 22.2 MAX 2840 MIN .00 AC-FT 16050
WTR YR 1988 TOTAL 13924.96 MEAN 38.0 MAX 2840 MIN .24 AC-FT 27620

e Estimated

09512600 TURKEY CREEK NEAR CLEATOR, AZ

LOCATION.--Lat 34°16'56", long 112°12'25", in SW¼SW¼SE¼ sec.36, T.11 N., R.1 E. (unsurveyed), Yavapai County, Hydrologic Unit 15070102, in Prescott National Forest, on right bank 0.7 mi upstream from Forest Route 259, 1.5 mi east of Cleator, and 9.3 mi south of Mayer.

DRAINAGE AREA.--89.4 mi^2.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 3,140 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good.

AVERAGE DISCHARGE.--9 years, 13.7 ft^3/s, 9,930 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,230 ft^3/s Feb. 19, 1980, gage height, 11.51 ft, from rating curve extended above 1,500 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 5, 1970, reached a stage of about 16 ft, from floodmarks, discharge, about 9,000 ft^3/s, from rating curve extended above 1,500 ft^3/s on basis of slope-area measurement at gage height 11.51 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	0615	929	4.24	Aug. 23	1845	*1,850	*5.76
Feb. 3	0530	484	3.19	Aug. 27	1630	828	4.03
Aug. 1	1700	1,120	4.56	Aug. 29	0400	1,690	5.50
Aug. 21	0300	1,350	5.26				

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	201	.93	2.5	17	7.8	.45	8.2	.15	.00	e86	e37
2	.00	33	.93	2.4	16	7.2	.46	7.0	.11	.00	4.3	19
3	.00	19	.93	2.4	207	7.4	.45	5.4	.09	.00	1.2	13
4	.00	13	.86	2.4	69	6.7	.42	4.4	.05	.00	.22	9.3
5	.00	18	.94	2.9	40	5.7	.42	3.6	.00	.00	e12	7.5
6	.00	51	1.7	6.0	30	5.1	.37	3.2	.00	.00	.25	6.1
7	.00	23	1.8	9.4	25	4.8	.23	2.9	.00	.00	.02	5.1
8	.00	14	1.4	8.5	22	4.0	.22	2.7	.00	.00	.0	4.3
9	.00	10	1.2	7.8	20	3.7	.21	2.5	.00	.00	.00	3.3
10	.00	8.0	1.1	7.8	19	3.4	.22	2.1	.00	.00	.00	2.9
11	.00	6.1	1.1	7.8	17	2.9	.22	1.8	.00	.00	.00	2.7
12	.00	4.8	1.0	7.6	16	2.9	.21	1.5	.00	.00	.00	2.4
13	.00	3.8	.93	7.7	15	2.8	.21	1.3	.00	.00	.00	1.7
14	.00	3.5	.93	7.0	14	2.6	.21	1.1	.00	.00	.00	1.2
15	.00	3.4	.96	6.7	13	2.5	.79	.98	.00	.00	.00	1.0
16	.00	2.9	.77	6.4	11	2.2	2.3	.93	.00	.00	.00	.62
17	.00	2.4	2.1	6.9	10	1.7	3.3	.93	.00	.00	.00	.48
18	.00	2.1	7.9	18	9.6	1.7	5.9	.97	.00	.00	.00	.38
19	.00	1.8	6.1	15	9.1	1.4	4.5	.86	.00	.00	.00	.25
20	.00	1.6	6.9	13	8.2	1.4	3.3	.58	.00	.00	3.7	.23
21	.00	1.5	5.5	12	7.6	1.2	4.5	.45	.00	.00	339	.22
22	.00	1.4	4.9	12	7.2	1.0	34	.34	.00	.00	27	.22
23	.00	1.4	4.7	12	6.6	.85	36	.32	.00	.00	129	.21
24	.00	1.3	4.6	15	6.0	.84	27	.33	.00	.00	21	.20
25	.00	1.2	3.9	14	5.9	.84	43	.29	.00	.00	6.1	.20
26	.00	1.1	3.1	14	5.9	.77	37	.26	.00	.00	2.9	.17
27	.00	1.1	3.1	15	6.2	.68	23	.25	.00	10	109	.17
28	.00	1.0	3.3	16	6.8	.46	17	.18	.00	.26	47	.15
29	.00	1.0	3.2	19	7.7	.45	13	.19	.00	.00	e491	.14
30	.00	.93	3.1	23	---	.46	10	.28	.00	.00	e113	.14
31	1.8	---	3.0	20	---	.45	---	.26	---	.00	e58	---
TOTAL	1.80	434.33	82.88	320.2	647.8	85.90	268.89	56.10	0.40	10.26	1450.69	120.28
MEAN	.058	14.5	2.67	10.3	22.3	2.77	8.96	1.81	.013	.33	46.8	4.01
MAX	1.8	201	7.9	23	207	7.8	43	8.2	.15	10	491	37
MIN	.00	.93	.77	2.4	5.9	.45	.21	.18	.00	.00	.00	.14
AC-FT	3.6	861	164	635	1280	170	533	111	.8	20	2880	239

CAL YR 1987 TOTAL 1115.94 MEAN 3.06 MAX 201 MIN .00 AC-FT 2210
WTR YR 1988 TOTAL 3479.53 MEAN 9.51 MAX 491 MIN .00 AC-FT 6900

e Estimated

09512800 AGUA FRIA RIVER NEAR ROCK SPRINGS, AZ

LOCATION.--Lat 34°00'56", long 112°10'02", in NW¼NW¼ sec.28, T.8 N., R.2 E., Yavapai County, Hydrologic Unit 15070102, on right bank 2.5 mi southwest of Rock Springs and 10 mi upstream from Lake Pleasant.

DRAINAGE AREA.--1,130 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1970 to current year (monthly discharge only, October 1973 to September 1974). Low-flow records not equivalent prior to Oct. 1, 1974, due to spring flow in streambed between sites in use.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,800 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1974, at site 600 ft upstream at datum 10.00 ft higher (now used as supplementary gage).

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--18 years, 86.5 ft^3/s, 62,670 acre-ft/yr; median of yearly mean discharges, 43 ft^3/s, 31,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59,500 ft^3/s Feb. 19, 1980, gage height, 21.08 ft recorded, 28.15 ft from floodmark, from rating curve extended above 21,000 ft^3/s on basis of slope-area measurement at gage height 27.2 ft; no flow at times each year prior to October 1974; since October 1974, no flow May 27 to July 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft^3/s and maximum (*), from rating curve extended logarithmically above 6,400 ft^3/s:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1200	3,620	10.11	Aug. 29	unknown	*19,200	*15.91
Apr. 22	1415	2,250	9.01				

Minimum daily discharge, 0.58 ft^3/s Aug. 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1380	2.7	30	82	23	5.5	42	2.2	22	6.0	84
2	1.0	776	2.8	26	71	24	5.2	34	2.0	5.9	9.7	73
3	.85	148	2.9	25	718	24	4.7	29	1.8	3.0	17	18
4	.79	56	3.0	25	717	25	4.3	24	1.7	2.1	14	9.4
5	.79	33	3.9	25	354	23	3.9	20	1.6	1.7	23	7.6
6	.79	520	5.3	33	221	21	3.5	18	1.5	e1.1	6.3	7.1
7	.79	325	4.5	69	159	19	3.3	17	1.5	e1.1	3.0	6.6
8	.79	107	4.2	77	117	17	3.3	16	1.5	e1.0	2.0	5.9
9	.79	58	4.3	59	91	16	3.3	14	e1.3	e.95	1.7	5.4
10	.78	37	4.3	57	77	16	3.0	13	e1.1	e.90	e1.1	4.7
11	.79	29	4.1	51	67	15	3.1	11	e1.1	e.85	e1.1	3.7
12	.82	22	3.8	47	60	15	2.9	9.5	e1.0	e6.1	e1.0	3.2
13	.86	16	3.8	51	54	14	2.8	8.2	e1.0	6.5	e.95	2.7
14	.98	12	4.3	45	52	14	3.1	6.9	e.95	3.7	e.88	2.5
15	1.1	11	4.7	40	48	13	4.0	6.2	e.91	3.4	e.79	2.2
16	1.1	8.8	4.8	39	44	13	7.1	5.5	e.89	2.9	e.72	2.0
17	.92	7.5	9.2	46	44	12	9.8	5.2	e.89	e1.1	e.70	1.9
18	.93	5.7	144	590	38	11	11	4.9	e.85	e.97	e.66	1.9
19	.93	4.7	142	558	40	11	9.6	4.6	e.84	e.87	e.62	2.0
20	.93	3.9	126	238	34	9.9	7.8	4.3	e.81	e11	e.58	2.0
21	.93	3.7	107	144	32	8.8	8.2	4.0	e.79	e1.1	392	2.1
22	.93	3.6	78	109	29	8.4	1010	3.5	e.79	e.75	155	2.6
23	1.1	3.5	62	96	27	7.4	1040	3.2	e.75	e.71	62	2.6
24	1.1	3.3	52	89	24	7.1	407	3.0	e.74	e.70	124	2.6
25	1.2	3.0	46	92	24	6.2	265	2.8	e.70	e.66	60	2.5
26	1.3	2.9	40	86	23	5.5	196	2.6	e.70	e.66	155	2.1
27	1.3	2.9	42	90	24	5.1	133	2.5	e.66	e.62	35	1.9
28	1.3	2.7	40	88	24	5.2	91	2.3	e.66	e.60	173	1.7
29	1.5	2.6	38	95	24	4.9	67	2.2	e.63	e11	2720	1.6
30	32	2.7	38	106	---	5.1	52	2.3	e13	2.9	719	1.6
31	29	---	35	98	---	5.3	---	2.4	---	8.0	409	---
TOTAL	89.69	3591.5	1062.6	3224	3319	404.9	3370.4	324.1	44.86	104.84	5095.80	267.1
MEAN	2.89	120	34.3	104	114	13.1	112	10.5	1.50	3.38	164	8.90
MAX	32	1380	144	590	718	25	1040	42	13	22	2720	84
MIN	.78	2.6	2.7	25	23	4.9	2.8	2.2	.63	.60	.58	1.6
AC-FT	178	7120	2110	6390	6580	803	6690	643	89	208	10110	530

CAL YR 1987 TOTAL 9916.91 MEAN 27.2 MAX 1380 MIN .19 AC-FT 19670
WTR YR 1988 TOTAL 20898.79 MEAN 57.1 MAX 2720 MIN .58 AC-FT 41450

e Estimated

09512800 AGUA FRIA RIVER NEAR ROCK SPRINGS, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1982 to current year.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT 1987											
27...	0920	1.3	623	8.15	23.0	20.5	24	716	8.8	104	74
NOV											
17...	0930	8.2	596	8.20	8.5	13.0	0.80	718	8.6	87	22
DEC											
15...	0910	4.7	680	8.26	5.0	9.5	0.60	721	10.4	96	K1
JAN 1988											
28...	1100	88	430	8.22	18.0	13.5	5.3	716	9.6	98	K1
FEB											
25...	1020	24	530	8.48	18.0	15.0	0.60	717	9.8	104	K23
MAR											
24...	1040	7.3	610	8.46	24.5	17.0	0.70	716	8.9	98	24
MAY											
03...	1150	31	532	8.48	22.5	21.0	0.70	713	8.4	101	K8
19...	1000	4.4	615	8.39	31.0	23.0	0.70	710	8.3	104	K17
JUN											
23...	1045	0.72	595	8.32	42.0	32.0	1.0	710	8.5	126	K9
JUL											
27...	1005	0.62	620	8.15	36.0	31.0	2.6	715	6.8	98	--
AUG											
25...	1115	71	375	8.17	32.0	29.0	1200	713	6.6	92	K10000
SEP											
28...	1045	1.9	610	8.24	30.0	23.0	1.5	715	7.3	91	93

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)
OCT 1987										
27...	110	240	18	52	26	50	1	2.9	261	0
NOV										
17...	32	230	20	53	23	40	1	2.3	270	0
DEC										
15...	38	270	33	63	28	47	1	2.4	285	0
JAN 1988										
28...	27	170	6	40	17	27	0.9	1.7	192	0
FEB										
25...	K7	220	16	52	22	36	1	1.7	237	2
MAR										
24...	K18	230	3	54	24	42	1	3.4	266	5
MAY										
03...	K16	210	6	49	22	36	1	1.8	238	7
19...	K5	230	5	51	25	42	1	1.8	232	5
JUN										
23...	K8	230	8	51	24	43	1	2.3	245	2
JUL										
27...	--	230	2	53	24	45	1	26	282	0
AUG										
25...	6400	140	4	38	12	21	0.8	2.4	170	0
SEP										
28...	K9	240	5	55	26	45	1	2.6	264	0

K Based on non-ideal colony count.

09512800 AGUA FRIA RIVER NEAR ROCK SPRINGS, AZ--Continued

WATER QUALITY DATA

DATE	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
OCT 1987										
27...	0	214	76	36	0.40	28	394	403	0.54	<0.100
NOV										
17...	0	221	70	30	0.40	26	373	370	0.51	0.100
DEC										
15...	0	234	80	34	0.40	24	415	423	0.56	<0.100
JAN 1988										
28...	0	157	42	16	0.30	22	263	264	0.36	<0.100
FEB										
25...	0	198	49	21	0.40	23	330	328	0.45	<0.100
MAR										
24...	0	226	63	26	0.40	24	370	376	0.50	<0.100
MAY										
03...	0	207	51	20	0.40	22	325	326	0.44	<0.100
19...	0	198	58	26	0.50	23	356	363	0.48	<0.100
JUN										
23...	0	204	60	28	0.40	26	371	366	0.50	<0.100
JUL										
27...	0	231	60	29	0.40	29	374	404	0.51	<0.100
AUG										
25...	0	139	38	12	0.30	20	240	229	0.33	0.200
SEP										
28...	0	218	57	26	0.30	29	382	385	0.52	<0.100

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P) (00673)
OCT 1987										
27...	<0.100	<0.20	--	--	0.040	0.030	0.030	0.09	0.04	0.0
NOV										
17...	0.120	<0.20	--	--	0.060	0.060	0.040	0.12	0.06	0.02
DEC										
15...	<0.100	<0.20	--	--	0.060	0.060	0.040	0.12	0.06	0.02
JAN 1988										
28...	<0.100	<0.20	--	--	0.040	0.040	0.020	0.06	0.04	0.02
FEB										
25...	<0.100	0.20	--	--	0.050	0.040	0.040	0.12	0.05	0.0
MAR										
24...	<0.100	<0.20	--	--	0.060	0.050	0.030	0.09	0.06	0.02
MAY										
03...	<0.100	0.30	--	--	0.040	0.040	0.020	0.06	0.04	0.02
19...	<0.100	<0.20	--	--	0.050	0.050	0.040	0.12	0.05	0.01
JUN										
23...	0.120	0.60	--	--	0.050	0.050	<0.010	--	0.05	0.05
JUL										
27...	<0.100	0.70	--	--	0.070	0.060	0.050	0.15	0.07	0.01
AUG										
25...	0.220	0.30	0.50	2.2	0.560	0.120	0.100	0.31	0.56	0.02
SEP										
28...	<0.100	0.30	--	--	0.070	0.070	0.050	0.15	0.07	0.02

< Actual value is known to be less than value shown.

09512800 AGUA FRIA RIVER NEAR ROCK SPRINGS, AZ--Continued

WATER QUALITY DATA

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
OCT 1987										
27...	16	100	170	190	<1	1	8	2600	5	<5
NOV										
17...	15	100	120	130	<1	2	15	100	<3	<5
DEC										
15...	24	100	140	130	1	4	6	50	<10	<5
JAN 1988										
28...	9	100	120	50	1	6	8	770	39	5
FEB										
25...	11	100	*<10	*90	1	1	7	120	10	<5
MAR										
24...	14	<100	150	120	<1	3	7	120	9	11
MAY										
03...	12	<100	90	100	2	1	6	120	3	<5
19...	13	<100	150	130	2	1	4	210	<3	<5
JUN										
23...	10	<100	--	140	<1	<1	5	80	10	<5
JUL										
27...	18	<100	130	150	1	3	4	430	11	<5
AUG										
25...	7	300	<10	70	<1	3	12	980	6	6
SEP										
28...	15	<100	170	150	<1	<1	5	310	14	<5

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1987										
27...	80	<0.10	<1	<1	20	1.5	0.8	<0.010	34	0.12
NOV										
17...	50	<0.10	<1	<1	<10	3.8	<0.1	<0.010	4	0.09
DEC										
15...	40	<0.10	<1	1	<10	2.0	0.1	<0.010	3	0.04
JAN 1988										
28...	30	<0.10	<1	<1	<10	3.9	0.2	<0.010	151	36
FEB										
25...	10	<0.10	<1	1	<10	2.6	0.2	<0.010	3	0.19
MAR										
24...	10	<0.10	<1	<1	<10	2.0	0.5	<0.010	4	0.08
MAY										
03...	10	<0.10	<1	1	10	2.6	0.5	<0.010	2	0.17
19...	10	<0.10	<1	<1	20	1.8	0.3	<0.010	1	0.01
JUN										
23...	30	<0.10	<1	<1	<10	2.2	0.5	<0.010	2	0.00
JUL										
27...	110	<0.10	<1	<1	<10	2.2	0.6	<0.010	8	0.01
AUG										
25...	370	<0.10	<1	1	40	7.0	*29	<0.010	2250	431
SEP										
28...	120	<0.10	<1	<1	<10	1.7	0.5	--	4	0.02

The following data were omitted from the 1987 report.

DATE	TIME	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)
OCT 1986		
22...	0910	232
NOV		
20...	0850	243
DEC		
19...	0900	252
JAN 1987		
27...	0830	253
FEB		
23...	0905	242
MAR		
27...	0920	203

DATE	TIME	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)
APR 1987		
21...	0950	235
MAY		
21...	0905	234
JUL		
06...	0915	203
AUG		
05...	0845	209
17...	0940	206
SEP		
21...	0925	226

* Value verified.
< Actual value is known to be less than value shown.

09512830 BOULDER CREEK NEAR ROCK SPRINGS, AZ

LOCATION.--Lat 33°59'55", long 112°12'57", in SE¼NW¼NW¼ sec.36, T.8 N., R1 E., Yavapai County, Hydrologic Unit 15070102, on left bank 2.2 mi upstream from Agua Fria River, 1.5 mi southwest of Rock Springs, and 7.1 mi northwest of New River.

DRAINAGE AREA.--37.8 mi^2.

PERIOD OF RECORD.--May 1983 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 1,890 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--5 years, 2.36 ft^3/s, 1,710 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,350 ft^3/s Aug. 29, 1983, gage height, 7.33 ft, from rating curve extended above 30 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days in 1987-88 water years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 30 ft^3/s, from rating curve extended as explained above, and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1615	75	2.67	Feb. 3	0730	170	3.30
Nov. 6	1830	133	3.09	Apr. 22	2145	165	3.27
Jan. 18	1215	89	2.61	Aug. 29	unknown	*2,350	*7.33

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	17	.11	1.1	6.9	.96	.07	3.6	.04	.02	.00	e7.0
2	.00	16	.11	.93	6.1	.81	.08	3.1	.03	.02	.00	e4.7
3	.00	5.6	.11	.83	66	1.1	.08	2.5	.03	.02	.00	e2.8
4	.00	2.5	.11	.76	35	1.9	.07	2.0	.03	.02	.00	e2.1
5	.00	2.0	.15	.71	21	1.3	.06	1.6	.03	.02	.00	e1.6
6	.00	46	.13	1.0	14	1.3	.05	1.1	.03	.02	.00	e1.2
7	.00	37	.11	5.4	11	1.0	.05	.91	.02	.02	.00	e.97
8	.00	12	.10	4.0	9.1	.72	.05	.71	.02	.02	.00	e.77
9	.00	6.2	.10	3.0	7.6	.61	.04	.62	.02	.02	.00	e.53
10	.00	3.5	.10	2.3	6.5	.50	.04	.48	.03	.02	.00	.09
11	.00	2.2	.10	2.0	5.7	.39	.04	.35	.02	.02	.00	.05
12	.00	1.4	.10	1.7	4.8	.38	.04	.23	.02	.02	.00	.03
13	.00	.99	.10	1.5	4.3	.33	.03	.17	.02	.02	.00	.02
14	.00	.80	.10	1.4	3.7	.31	.03	.13	.02	.01	.00	.02
15	.00	.58	.10	1.2	3.3	.27	.04	.11	.02	.01	.00	.02
16	.00	.49	.08	1.1	2.9	.23	.08	.10	.02	.01	.00	.02
17	.00	.40	.18	1.3	2.4	.19	.07	.10	.02	.00	.00	.02
18	.00	.30	.70	31	2.1	.16	.07	.09	.02	.00	.00	.02
19	.00	.22	6.0	21	1.9	.15	.05	.08	.02	.00	.00	.01
20	.00	.19	11	12	1.8	.16	.04	.07	.02	.00	.00	.01
21	.00	.17	8.7	9.7	1.7	.17	.07	.06	.02	.00	.02	.01
22	.00	.17	6.7	10	1.5	.17	64	.05	.02	.00	.02	.01
23	.00	.15	5.5	11	1.4	.17	78	.05	.02	.00	.02	.01
24	.03	.12	4.7	14	1.3	.12	46	.04	.02	.00	.02	.01
25	.04	.11	3.7	14	1.2	.10	27	.04	.02	.00	.02	.01
26	.03	.11	2.7	12	1.1	.09	17	.04	.02	.00	.02	.01
27	.03	.11	2.1	13	1.1	.09	11	.04	.02	.00	11	.01
28	.02	.11	1.7	13	1.0	.08	8.2	.04	.02	.00	33	.01
29	.04	.11	1.6	11	.99	.07	6.2	.04	.02	.00	e263	.01
30	.05	.11	1.5	9.9	---	.08	4.8	.04	.02	.00	e33	.01
31	.05	---	1.3	8.1	---	.07	---	.04	---	.00	e12	---
TOTAL	0.29	156.64	59.79	219.93	227.39	13.98	263.35	18.53	0.68	0.29	352.12	22.08
MEAN	.009	5.22	1.93	7.09	7.84	.45	8.78	.60	.023	.009	11.4	.74
MAX	.05	46	11	31	66	1.9	78	3.6	.04	.02	263	7.0
MIN	.00	.11	.08	.71	.99	.07	.03	.04	.02	.00	.00	.01
AC-FT	.6	311	119	436	451	28	522	37	1.3	.6	698	44

CAL YR 1987 TOTAL 502.45 MEAN 1.38 MAX 46 MIN .00 AC-FT 997
WTR YR 1988 TOTAL 1335.07 MEAN 3.65 MAX 263 MIN .00 AC-FT 2650

e Estimated

09512860 HUMBUG CREEK NEAR CASTLE HOT SPRINGS, AZ

LOCATION.--Lat 33°58'02", long 112°17'34", in NW¼SE¼NE¼ sec.7, T.7 N., R.1 E., Yavapai County, Hydrologic Unit 15070102, on right bank, 3.0 mi upstream from Lake Pleasant, and 4.0 mi southeast of Castle Hot Springs.

DRAINAGE AREA.--59.9 mi^2.

PERIOD OF RECORD.--May 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,790 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

AVERAGE DISCHARGE.--5 years, 2.75 ft^3/s, 1,990 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft^3/s, Aug. 29, 1988, gage height 8.28 ft, from rating curve extended above 45 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,000 ft^3/s Aug. 29, gage height 8.28 ft; from rating curve extended as explained above; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	36	.17	.74	4.0	1.1	.26	2.6	.14	.00	.61	3.2
2	.01	.66	.17	.70	3.9	1.1	.25	2.3	.13	.00	.21	1.7
3	.01	.28	.17	.67	23	1.2	.23	1.9	.11	.01	.09	.76
4	.00	.23	.17	.67	21	1.5	.22	1.6	.09	.00	4.4	.39
5	.01	1.8	.37	.69	13	1.2	.20	1.3	.08	.00	.58	.27
6	.01	20	.21	.97	8.5	1.1	.20	1.1	.07	.00	.17	.19
7	.01	1.4	.20	1.0	6.3	.93	.19	1.1	.08	.00	.11	.17
8	.01	.34	.20	1.0	5.1	.81	.19	1.1	.08	.00	.10	.16
9	.01	.22	.20	1.1	4.2	.72	.21	1.0	.08	.00	.09	.15
10	.01	.19	.20	1.1	3.6	.71	.18	.95	.07	.00	.08	.14
11	.02	.19	.19	1.0	3.1	.61	.17	.76	.05	.00	.07	.14
12	.02	.17	.18	.96	2.8	.63	.17	.58	.04	.00	.05	.14
13	.03	.17	.18	.87	2.4	.69	.18	.41	.05	.00	.02	.13
14	.03	.17	.20	.81	2.2	.70	.20	.32	.05	.00	.00	.12
15	.03	.17	.20	.81	2.0	.60	.37	.26	.02	.00	.00	.12
16	.03	.15	.20	.86	1.8	.58	.48	.25	.00	.00	.00	.12
17	.03	.16	4.1	1.6	1.6	.52	.37	.25	.00	.00	.00	.12
18	.03	.16	18	73	1.5	.48	.33	.24	.00	.00	.00	.12
19	.03	.15	1.4	11	1.4	.48	.28	.23	.06	.00	.00	.12
20	.03	.15	1.3	4.9	1.2	.43	.25	.19	.03	.00	.07	.12
21	.03	.15	1.9	3.7	1.2	.44	.46	.18	.00	.00	5.6	.11
22	.03	.15	1.9	3.1	1.1	.44	37	.16	.00	.00	.74	.12
23	.06	.16	1.7	3.1	1.1	.38	22	.15	.00	.00	.16	.12
24	.05	.16	1.5	3.5	1.0	.36	15	.14	.00	.05	.11	.12
25	.05	.16	1.3	4.0	1.0	.35	12	.13	.00	.12	.10	.12
26	.04	.17	1.1	4.0	.99	.28	11	.13	.00	.00	.10	.12
27	.04	.17	1.0	3.9	.95	.26	8.8	.12	.00	.00	16	.12
28	.04	.17	.95	4.2	1.0	.23	6.5	.12	.00	.00	6.1	.11
29	.05	.17	.89	4.6	1.1	.25	4.6	.12	.04	.00	181	.11
30	.05	.17	.82	4.8	---	.26	3.4	.15	.01	.00	25	.11
31	.21	---	.80	4.6	---	.26	---	.16	---	.01	7.1	---
TOTAL	1.02	64.39	41.87	147.95	122.04	19.60	125.69	20.00	1.28	0.19	248.66	9.54
MEAN	.033	2.15	1.35	4.77	4.21	.63	4.19	.65	.043	.006	8.02	.32
MAX	.21	36	18	73	23	1.5	37	2.6	.14	.12	181	3.2
MIN	.00	.15	.17	.67	.95	.23	.17	.12	.00	.00	.00	.11
AC-FT	2.0	128	83	293	242	39	249	40	2.5	.4	493	19

CAL YR 1987 TOTAL 258.67 MEAN .71 MAX 36 MIN .00 AC-FT 513
WTR YR 1988 TOTAL 802.23 MEAN 2.19 MAX 181 MIN .00 AC-FT 1590

09512970 COTTONWOOD CREEK NEAR WADDELL DAM, AZ

LOCATION.--Lat 33°53'55", long 112°18'39", in NW¼SW¼SE¼ sec.36, T.7 N., R.1 W., Yavapai County Hydrologic Unit 15070102, on left bank 4 mi northwest of Waddell Dam and 1 mi upstream from the mouth at Lake Pleasant.

DRAINAGE AREA.--9.28 mi^2.

PERIOD OF RECORD.--May 1983 to current year.

REVISED RECORDS.--WDR AZ-86-1: 1983(M).

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 1,660 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--5 years, 0.13 ft3/s, 94 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft^3/s, Aug. 21, 1988, gage height 5.80 ft, from rating curve extended above 0.3 ft^3/s on basis of slope-area measurement of peak flow; no flow for many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 1,160 ft^3/s, Aug. 21, gage height 5.80 ft, from rating curve extended as explained above; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	e.81	e.09	e.14	e.10	e.06	e.02	e.01	e.00	e.02	e.00	e.13
2	e.00	e.02	e.09	e.14	e.09	e.05	e.02	e.01	e.00	e.01	e.01	e.11
3	e.00	e.02	e.09	e.13	e.10	e.05	e.02	e.01	e.00	e.01	e.00	e.08
4	e.00	e.02	e.10	e.13	e.11	e.05	e.02	e.01	e.00	e.00	e.01	e.05
5	e.00	e.28	e.10	e.13	e.10	e.05	e.02	e.01	e.00	e.00	e.06	e.03
6	e.00	e.92	e.10	e.14	e.10	e.05	e.02	e.01	e.00	e.00	e.01	e.03
7	e.00	e.09	e.10	e.14	e.10	e.05	e.02	e.01	e.00	e.00	e.00	e.02
8	e.00	e.07	e.10	e.13	e.09	e.05	e.02	e.01	e.00	e.00	e.00	e.02
9	e.01	e.07	e.10	e.13	e.09	e.05	e.02	e.01	e.00	e.00	e.00	e.02
10	e.01	e.07	e.11	e.13	e.09	e.04	e.02	e.01	e.00	e.00	e.00	e.02
11	e.01	e.07	e.12	e.12	e.09	e.04	e.02	e.01	e.00	e.01	e.00	e.02
12	e.01	e.07	e.12	e.12	e.09	e.04	e.02	e.01	e.00	e.00	e.00	e.01
13	e.01	e.07	e.12	e.13	e.08	e.04	e.02	e.01	e.00	e.00	e.00	e.02
14	e.01	e.06	e.12	e.12	e.08	e.04	e.02	e.01	e.00	e.00	e.00	e.01
15	e.01	e.07	e.12	e.12	e.08	e.04	e.02	e.01	e.00	e.00	e.00	e.01
16	e.01	e.07	e.13	e.13	e.08	e.04	e.02	e.01	e.00	e.00	e.00	e.01
17	e.01	e.07	e.27	e.14	e.08	e.04	e.02	e.01	e.00	e.00	e.00	e.01
18	e.01	e.07	e.65	e1.5	e.08	e.04	e.02	e.01	e.00	e.00	e.00	e.01
19	e.01	e.07	e.26	e.28	e.07	e.04	e.02	e.01	e.00	e.00	e.00	e.01
20	e.01	e.08	e.21	e.19	e.07	e.03	e.02	e.01	e.00	e.00	e.01	e.01
21	e.01	e.08	e.20	e.16	e.07	e.03	e.01	e.01	e.00	e.00	e20	e.01
22	e.01	e.08	e.20	e.13	e.07	e.03	e.01	e.01	e.00	e.00	e.43	e.01
23	e.01	e.08	e.19	e.13	e.07	e.03	e.01	e.01	e.00	e.00	e.14	e.01
24	e.01	e.08	e.19	e.13	e.07	e.03	e.01	e.01	e.00	e.00	e.04	e.01
25	e.01	e.08	e.19	e.12	e.06	e.03	e.01	e.01	e.00	e.00	e.01	e.01
26	e.01	e.08	e.18	e.12	e.06	e.03	e.01	e.01	e.00	e.00	e.05	e.01
27	e.01	e.08	e.18	e.11	e.06	e.03	e.01	e.01	e.00	e.00	e1.2	e.01
28	e.01	e.08	e.17	e.11	e.06	e.03	e.01	e.01	e.00	e.00	e.30	e.01
29	e.39	e.09	e.16	e.11	e.06	e.03	e.01	e.01	e.01	e.00	e.17	e.00
30	e.01	e.09	e.16	e.11	---	e.02	e.01	e.00	e.02	e.00	e.16	e.00
31	e.01	---	e.15	e.10	---	e.02	---	e.00	---	e.00	e.15	---
TOTAL	0.61	3.89	5.07	5.52	2.35	1.20	0.50	0.29	0.03	0.05	22.75	0.71
MEAN	.020	.13	.16	.18	.081	.039	.017	.009	.001	.002	.73	.024
MAX	.39	.92	.65	1.5	.11	.06	.02	.01	.02	.02	20	.13
MIN	.00	.02	.09	.10	.06	.02	.01	.00	.00	.00	.00	.00
AC-FT	1.2	7.7	10	11	4.7	2.4	1.0	.6	.06	.1	45	1.4

CAL YR 1987 TOTAL 14.28 MEAN .039 MAX 1.1 MIN .00 AC-FT 28
WTR YR 1988 TOTAL 42.97 MEAN .12 MAX 20 MIN .00 AC-FT 85

e Estimated

09513000 AGUA FRIA RIVER AT WADDELL DAM, AZ

LOCATION.--Lat 33°51'20", long 112°15'58", in SW¼ sec.16, T.6 N., R.1 E., Maricopa County, Hydrologic Unit 15070102, at left upstream end of Waddell Dam, and 22 mi northwest of Glendale.

DRAINAGE AREA.--1,459 mi^2.

PERIOD OF RECORD.--November 1910 to September 1914 (gage heights only), October 1914 to September 1919, October 1919 to September 1924 (gage heights only), October 1933 to current year (monthly discharge only). Published as "near Glendale" prior to 1920, and as "at Lake Pleasant Dam" 1920 to September 1962.

REVISED RECORDS.--WSP 1213: 1915-16, 1918-19. WSP 1343: Drainage area. WSP 1513: 1956.

GAGE.--Nonrecording gage on Lake Pleasant read once daily. Datum of gage is 1,431.2 ft above National Geodetic Vertical Datum of 1929. Prior to Sept. 30, 1924, nonrecording gage or water-stage recorder at several sites in the vicinity of diversion dam 1.5 mi downstream from Waddell Dam, at different datum.

REMARKS.--Records good. Figures given herein represent flow into Lake Pleasant. Inflow computed on basis of three factors as follows: 1. Change in contents of Lake Pleasant and in contents of small reservoir behind diversion dam 1.5 mi downstream from Lake Pleasant. 2. (a) Release from Lake Pleasant, computed from twice-daily readings by Clausen-Pierce weir rule in Beardsley Canal, checked by current-meter measurements by U.S. Geological Survey. (b) Spill from Lake Pleasant, measured over diversion dam based on staff-gage readings. See tables of diversions and spill below. 3. Effect of rainfall and evaporation on lake; evaporation assumed as 0.85 of that measured once daily in 3-ft-square land pan buried 1 ft in ground near left end of Waddell Dam. Effect of bank storage and bank release in Lake Pleasant is not taken into account. For months when inflow to lake is small and other factors relatively large, discordant figures of runoff may appear. Such discrepancies that may be attributed to inaccuracies in the capacity table, or to the fact that bank storage and bank release are not taken into account, result in quantities too large for periods of falling stage, but tend to be compensated for by quantites too small for periods of rising stage. Inaccuracies in figures of release and evaporation, which may be within reasonable limits within themselves, may result in disproportionately large inaccuracies in small figures of inflow computed as residuals. Diversions for irrigation above Lake Pleasant of probably not over 1,000 acres. Spill occurred in 1941, 1966, 1968, 1978, 1979, 1980, and 1983 water years.

COOPERATION.--Records collected and prepared in cooperation with Maricopa County Municipal Water Conservation District No. 1.

AVERAGE DISCHARGE.--60 years (water years 1915-19, 1934-88), 96.2 ft^3/s, 69,700 acre-ft/yr; median of yearly mean discharges, 41 ft^3/s, 29,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 105,000 ft^3/s Jan. 28, 1916, gage height, 30 ft, same datum as in 1919, from floodmarks, Nov. 27, 1919, gage height, 33 ft, datum then in use, from floodmarks, from rating curve extended above 13,000 ft^3/s on basis of velocity-area studies (on basis of comparative gage heights, the flood of Nov. 27, 1919, is believed to have been the greater); no flow during spring and summer of several years.

MONTHLY INFLOW TO LAKE PLEASANT; SPILL AND DIVERSIONS BELOW LAKE PLEASANT, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Month	Inflow to Lake Pleasant		Diversions in acre-feet	Spill in acre-feet
	Mean (cfs)	Runoff in acre-feet		
October	0	0	0	0
November	187	11,130	0	0
December	37.5	2,310	0	0
CAL YR 1987	35.1	25,380	6,630	0
January	127	7,810	0	0
February	152	8,730	0	0
March	20.8	1,280	3,510	0
April	125	7,440	4,760	0
May	25.6	1,580	5,060	0
June	16.0	954	7,760	0
July	6.85	421	2,080	0
August	230	14,130	0	0
September	21.0	1,250	0	0
WTR YR 1988	78.6	57,040	23,170	0

09513500 LAKE PLEASANT AT WADDELL DAM, AZ

LOCATION.--Lat 35°51'20", long 112°15'58", in SW¼ sec.16, T.6 N., R.1 E., Maricopa County, Hydrologic Unit 15070102, at left upstream end of Waddell Dam on Agua Fria River.

DRAINAGE AREA.--1,459 mi^2.

PERIOD OF RECORD.--February 1928 to current year (annual figures only prior to 1930). Prior to October 1963 published as "at Lake Pleasant Dam."

GAGE.--Nonrecording gage read once daily. Datum of gage is 1,431.2 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Lake is formed by concrete multiple-arch dam; dam completed and storage began in 1927. Capacity, 157,200 acre-ft, of which 84,300 acre-ft is between gage heights 66 ft - 32 ft above centerline of outlet works - and 146.0 ft, crest of spillway, and 72,900 acre-ft between 146.0 ft and 170.0 ft, top of spillway gates. At times, capacity is greater due to trash build-up on top of spillway gates. This condition is known to have occurred in water years 1978, 1979, 1980, and 1983. There is no storage below gage height 66 ft because of accumulated sediment. Water released from reservoir flows down river channel 1.5 mi to diversion dam where it is diverted for irrigation near Beardsley. Figures given herein represent usable storage in Lake Pleasant (based on 1979 capacity table). Contents of small reservoir formed by diversion dam is not included.

COOPERATION.--Gage-height record furnished by Maricopa County Municipal Water Conservation District No. 1.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 178,500 acre-ft Apr. 19, 1941, of which 500 acre-ft was uncontrolled storage; maximum gage height, 170.92 ft Mar. 28, 1979; no usuable contents Sept. 5, 1933, July 19 to Aug. 13, 1940.

EXTREMES FOR CURRENT YEAR.--Maximum storage, 78,200 acre-ft Mar. 7; maximum gage height, 143.42 ft Mar. 7; minimum contents, 50,900 acre-ft Oct. 28; minimum gage height, 130.37 ft Oct. 28.

Capacity table (gage height, in feet, and usable storage, in acre-feet)

130	50,250
140	70,350
150	94,450

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
OBSERVATION AT 17:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	51700	52700	61500	63300	70300	77900	74100	75900	70100	61300	58500	72300
2	51700	58000	61400	63300	70600	77900	73900	75800	69900	61000	58500	72600
3	51600	58700	61400	63300	71500	78000	73700	75700	69800	60600	58400	72700
4	51600	58900	61400	63300	74000	78100	73400	75700	69600	60300	58400	72700
5	51500	59100	61400	63400	74900	78100	73200	75500	69400	60000	58500	72700
6	51400	59600	61400	63400	75500	78100	73000	75400	69000	59800	58400	72700
7	51400	61000	61400	63500	76000	78200	72700	75400	68700	59700	58300	72600
8	51300	61500	61400	63600	76200	78000	72400	75300	68500	59600	58300	72600
9	51300	61700	61400	63700	76500	77900	72100	75200	68200	59600	58200	72600
10	51300	61800	61400	63800	76600	77800	71900	75200	67900	59600	58200	72500
11	51200	61800	61400	63900	76800	77700	71600	75000	67500	59500	58100	72500
12	51200	61800	61400	63900	76900	77600	71300	74900	67200	59400	58100	72400
13	51200	61800	61400	64000	77000	77500	71100	74700	66900	59400	58000	72400
14	51200	61800	61400	64000	77100	77400	70800	74500	66600	59300	57900	72300
15	51200	61800	61300	64000	77200	77300	70600	74300	66300	59300	57900	72200
16	51100	61800	61300	64100	77200	77200	70600	74200	66100	59200	57800	72100
17	51100	61800	61500	64200	77300	77200	70400	74000	65800	59200	57800	72100
18	51100	61700	61800	65500	77400	77100	70300	73700	65500	59100	57700	72000
19	51000	61700	62100	67200	77400	77000	70200	73500	65200	59100	57700	72000
20	51000	61700	62300	67900	77500	76900	70200	73200	64900	59000	57800	71900
21	51000	61600	62600	68200	77500	76700	70100	72800	64600	59000	58900	71900
22	51000	61600	62700	68400	77600	76600	70600	72500	64300	59000	60400	71800
23	51000	61600	62800	68600	77600	76400	73600	72200	63900	58900	60600	71800
24	51000	61600	62900	68900	77600	76200	74600	72000	63600	58900	60800	71700
25	51000	61600	63000	69000	77700	76000	75200	71700	63300	58800	61100	71700
26	51000	61600	63100	69200	77700	75700	75700	71400	62900	58700	61200	71600
27	51000	61500	63100	69400	77800	75500	75900	71200	62600	58700	61400	71600
28	50900	61500	63200	69500	77800	75200	76000	70900	62300	58600	61900	71500
29	51000	67900	63200	69700	77800	74900	76000	70600	61900	58600	66800	71400
30	51100	61500	63200	69900	---	74600	75900	70400	61600	58600	70100	71400
31	51100	---	63300	70100	---	74300	---	70200	---	58500	71700	---
MAX	51700	67900	63300	70100	77800	78200	76000	75900	70100	61300	71700	72700
MIN	50900	52700	61300	63300	70300	74300	70100	70200	61600	58500	57700	71400
(*)	130.45	135.84	136.70	139.90	143.28	141.77	142.47	139.94	135.88	134.37	140.59	140.45
(**)	-700	+10400	+1800	+6800	+7700	-3500	+1600	-5700	-8600	-3100	+13200	-300

CAL YR 1987 MAX 67900 MIN 50900 ** +6900
WTR YR 1988 MAX 78200 MIN 50900 ** +19600

* Gage height, in feet, at 1700 hours on last day of month.
** Change in storage, in acre-feet.

09513600 AGUA FRIA RIVER BELOW WADDELL DAM, AZ

WATER-QUALITY RECORDS

LOCATION.--Lat 33°49'55", long 112°16'24", in SE¼ sec.29, T.6 N., R.1 E., Maricopa County, Hydrologic Unit 15070102, 1.5 mi downstream from Lake Pleasant.

DRAINAGE AREA.--1,459 mi^2.

PERIOD OF RECORD.--December 1950 to September 1958, March 1982 to current year.

REMARKS.--No flow in channel or diversions to Beardsley Canal Oct. 1 to Mar. 8, Apr. 23-25, July 14 to Sept. 30.

WATER QUALITY DATA

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
MAR 1988											
16...	0930	37	540	8.42	13.5	12.0	6.7	723	9.7	96	K10
MAY											
02...	1105	48	544	8.40	20.0	17.0	13	727	9.2	100	K10
20...	0925	122	528	8.19	28.0	18.0	12	721	8.4	94	K12
JUN											
29...	0905	144	530	8.08	31.5	19.0	7.6	727	8.2	93	K17

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HYDROXIDE WATER DIS IT FIELD MG/L AS OH (71834)
MAR 1988											
16...	140	190	10	41	21	40	1	3.6	255	6	0
MAY											
02...	36	200	21	44	22	40	1	3.4	212	4	0
20...	57	190	15	42	21	38	1	2.8	209	0	0
JUN											
29...	44	190	15	42	21	39	1	3.3	218	0	0

DATE	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)
MAR 1988											
16...	219	65	28	0.40	19	330	326	0.45	<0.100	<0.100	0.30
MAY											
02...	180	61	29	0.40	19	327	327	0.44	<0.100	<0.100	0.60
20...	171	60	27	0.50	19	320	317	0.44	0.100	<0.100	0.40
JUN											
29...	179	55	26	0.40	19	317	312	0.43	<0.100	<0.100	0.40

DATE	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHATE, ORTHO, DISSOLVED (MG/L AS PO4) (00660)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOSPHOROUS ORGANIC DISSOLVED (MG/L AS P) (00673)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)
MAR 1988										
16...	--	--	0.050	0.030	0.010	0.03	0.05	0.02	8	9
MAY										
02...	--	--	0.050	0.020	0.010	0.03	0.05	0.01	13	12
20...	0.50	2.2	0.060	0.050	0.030	0.09	0.06	0.02	15	14
JUN										
29...	--	--	0.070	0.060	0.050	0.15	0.07	0.01	14	15

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09513600 AGUA FRIA RIVER BELOW WADDELL DAM, AZ--Continued

WATER QUALITY DATA

DATE	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
MAR 1988										
16...	100	59	120	110	<1	<1	3	1	14	6
MAY										
02...	<100	57	100	110	1	<1	3	<1	8	5
20...	<100	52	120	120	2	<1	2	2	8	3
JUN										
29...	<100	54	100	100	<1	2	2	1	4	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
MAR 1988										
16...	510	12	<5	<5	130	2	0.30	<0.1	<1	<1
MAY										
02...	620	3	<5	<5	160	4	<0.10	<0.1	<1	<1
20...	690	5	<5	<5	230	10	<0.10	<0.1	<1	<1
JUN										
29...	530	63	<5	<5	260	56	<0.10	<0.1	<1	<1

DATE	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CYANIDE TOTAL (MG/L AS CN) (00720)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAR 1988										
16...	1	<1.0	20	<3	5.0	0.7	<0.010	<0.01	12	1.2
MAY										
02...	1	<1.0	20	14	5.1	0.8	<0.010	<0.01	16	2.1
20...	<1	<1.0	10	9	4.6	0.6	<0.010	<0.01	13	4.3
JUN										
29...	<1	<1.0	<10	8	5.7	--	<0.010	<0.01	12	4.7

The following data were omitted from the 1987 report.

DATE	TIME	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)
JUNE 1987		
23...	0815	182

< Actual value is known to be less than value shown.

09513780 NEW RIVER NEAR ROCK SPRINGS, AZ

LOCATION.--Lat 33°58'27", long 112°05'54", in SW¼SW¼ sec.6, T.7 N., R.3 E., Maricopa County, Hydrologic Unit 15070102, on right bank 180 ft upstream from road crossing and 6 mi southeast of Rock Springs.

DRAINAGE AREA.--67.3 mi^2.

PERIOD OF RECORD.--Water years 1962-65 (annual maximums only), October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,310 ft above National Geodetic Vertical Datum of 1929, from topographic map. Jan. 2, 1964, to Sept. 30, 1965, crest-stage gage, and Oct. 28, 1965, to Nov. 16, 1967, water-stage recorder, at same site at datum 1.00 ft higher.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--23 years, 13.6 ft^3/s, 9,850 acre-ft/yr; median of yearly mean discharges, 5.3 ft^3/s, 3,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft^3/s Sept. 5, 1970, gage height, 13.5 ft, from profile past gage, from rating curve extended above 380 ft^3/s on basis of slope-area measurements at gage heights 3.6, 4.73, 7.3, 10.7, and 13.5 ft; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	0530	*4,980	*6.84	Apr. 22	1230	255	3.48
Dec. 18	0245	698	4.14	Aug. 21	1600	2,190	5.52
Jan. 18	0815	2,220	5.54	Aug. 27	1730	410	3.76
Feb. 3	0900	405	3.67				

No flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	484	.17	2.8	5.3	2.0	.23	2.3	.00	.00	.00	6.1
2	.00	18	.17	2.7	5.0	2.0	.23	2.1	.00	.00	.00	5.0
3	.00	3.1	.16	2.7	84	2.1	.21	1.9	.00	.00	.00	2.4
4	.00	1.2	.18	2.6	26	2.0	.19	e1.7	.00	.00	.00	1.4
5	.00	.74	.36	2.5	15	1.9	.17	e1.5	.00	.00	.00	.82
6	.00	2.5	.82	2.9	10	1.7	.15	e1.3	.00	.00	.00	.67
7	.00	3.3	1.0	2.9	8.4	1.6	.14	1.2	.00	.00	.00	.52
8	.00	4.6	.72	2.7	7.3	1.5	.13	1.1	.00	.00	.00	.32
9	.00	6.7	.55	2.5	6.4	1.4	.11	.97	.00	.00	.00	.22
10	.00	4.2	.46	2.3	5.8	1.4	.11	.86	.00	.00	.00	.12
11	.00	3.0	.46	2.3	5.3	1.3	.11	.74	.00	.00	.00	.09
12	.00	2.5	.49	2.2	4.9	1.3	.11	.63	.00	.00	.00	.08
13	.00	2.3	.64	2.0	4.4	1.3	.11	.49	.00	.00	.00	.04
14	3.3	2.0	.64	1.9	3.8	1.2	.14	.38	.00	.00	.00	.01
15	.0	1.9	.61	1.9	3.4	1.1	.29	.29	.00	.00	.00	.00
16	.00	1.0	.68	2.1	3.3	.97	.51	.26	.00	.00	.00	.00
17	.00	.28	13	3.2	3.1	.92	.26	.25	.00	.00	.00	.00
18	.00	.25	202	525	3.1	.88	.34	.22	.00	.00	.00	.00
19	.00	.24	54	110	3.0	.87	.46	.19	.00	.00	.00	.00
20	.00	.23	40	38	2.8	.84	.45	.13	.00	2.1	.00	.00
21	.00	.22	16	21	2.8	.81	1.1	.11	.00	.01	178	.00
22	.00	.18	9.8	16	2.7	.73	73	.08	.00	.00	14	.00
23	.00	.16	7.2	14	2.5	.66	31	.04	.00	.00	1.6	.00
24	.00	.16	5.9	15	2.4	.55	11	.01	.00	.00	.34	.00
25	.00	.15	5.1	18	2.2	.39	6.6	.00	.00	.00	.10	.00
26	.00	.14	4.2	13	2.2	.33	4.8	.00	.00	.00	4.5	.00
27	.00	.13	3.5	10	2.4	.28	3.5	.00	.00	.00	41	.00
28	.00	.15	3.2	8.4	2.2	.26	3.0	.00	.00	.00	20	.00
29	.59	.15	3.2	7.4	2.1	.25	2.8	.00	.00	.00	10	.00
30	.07	.15	3.1	6.5	---	.25	2.6	.00	.00	.00	17	.00
31	.00	---	3.0	5.8	---	.24	---	.00	---	.00	9.3	---
TOTAL	3.96	543.63	381.31	850.3	231.8	33.03	143.85	18.75	0.00	2.11	295.84	17.79
MEAN	.13	18.1	12.3	27.4	7.99	1.07	4.79	.60	.00	.068	9.54	.59
MAX	3.3	484	202	525	84	2.1	73	2.3	.00	2.1	178	6.1
MIN	.00	.13	.16	1.9	2.1	.24	.11	.00	.00	.00	.00	.00
AC-FT	7.9	1080	756	1690	460	66	285	37	.0	4.2	587	35

CAL YR 1987 TOTAL 1891.54 MEAN 5.18 MAX 484 MIN .00 AC-FT 3750
WTR YR 1988 TOTAL 2522.37 MEAN 6.89 MAX 525 MIN .00 AC-FT 5000

e Estimated

09513860 SKUNK CREEK NEAR PHOENIX, AZ

LOCATION.--Lat 33°43'50", long 112°07'09", in SE¼ sec.35, T.5 N., R.2 E., Maricopa County, Hydrologic Unit 15070102, on right bank dike of Skunk Creek flood control channel, 300 ft east of frontage road of Interstate Highway 17, 3 mi north of Adobe and 20 mi north of City Hall in Phoenix.

DRAINAGE AREA.--64.6 mi^2.

PERIOD OF RECORD.--Water years 1960-67 (annual maximums only), October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,472.60 ft above National Geodetic Vertical Datum of 1929. May 1961 to Sept. 30, 1967, crest-stage gage at site 400 ft downstream at datum 6.67 ft lower, and Oct. 1, 1967 to Dec. 29, 1984, at site 300 ft downstream at datum 12.66 ft lower.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--21 years, 1.62 ft^3/s, 1,170 acre-ft/yr; median of yearly mean discharges, 0.72 ft^3/s, 520 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,500 ft^3/s Aug. 1, 1964, gage height, 10.48 ft, present datum, from rating curve extended above 6,200 ft^3/s; maximum gage height, 12.24 ft Sept. 5, 1970; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 29	2100	474	2.20	Jan. 18	1300	251	1.95
Nov. 1	0600	*2,250	*3.24	Aug. 30	0200	2,200	3.22

No flow for most of year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e286	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	e6.3	e2.2	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	e14	e68	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	e.29	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	e35	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	e12	.00	.00	.00	---	.00	.00	.00	.00	.00	e252	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	47.00	286.00	20.30	70.49	0.00	0.00	0.00	0.00	0.00	0.00	252.00	0.00
MEAN	1.52	9.53	.65	2.27	.00	.00	.00	.00	.00	.00	8.13	.00
MAX	35	286	14	68	.00	.00	.00	.00	.00	.00	252	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	93	567	40	140	.0	.0	.0	.0	.0	.0	500	.0

CAL YR 1987 TOTAL 399.30 MEAN 1.09 MAX 286 MIN .00 AC-FT 792
WTR YR 1988 TOTAL 675.79 MEAN 1.85 MAX 286 MIN .00 AC-FT 1340

e Estimated

09516500 HASSAYAMPA RIVER NEAR MORRISTOWN, AZ

LOCATION.--Lat 33°53'06", long 112°39'41", in SW¼SE¼ sec.3, T.6 N., R.4 W., Maricopa County, Hydrologic Unit 15070103, on left bank 600 ft downstream from mouth of San Domingo Wash, 3.0 mi northwest of Morristown, and 7 mi southeast of Wickenburg.

DRAINAGE AREA.--774 mi^2.

PERIOD OF RECORD.--October 1938 to June 1947 (continuous-record station), 1954, 1956, 1964-81 (partial-record station). October 1981 to current year (discharge above 500 ft^3/s only).

GAGE.--Water-stage recorder. Datum of gage is 1,831.16 ft above National Geodetic Vertical Datum of 1929. Crest-stage gage at same site and datum 1954, 1956, and 1964-81.

REMARKS.--Records poor. Only daily discharges above 500 ft^3/s are published.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 47,500 ft^3/s Sept. 5, 1970, gage height, 19.0 ft, from high-water profile past gage and on basis of slope-area measurement of peak flow; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,820 ft^3/s Aug. 27, gage height, 11.78 ft, from high-water mark gage well.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	e770	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	e1150	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

e Estimated

09517000 HASSAYAMPA RIVER NEAR ARLINGTON, AZ

LOCATION.--Lat 33°20'50", long 112°43'30", in NW¼ sec.13, T.1 S., R.5 W., Maricopa County, Hydrologic Unit 15070104, at former U.S. Highway 80, 1.6 mi upstream from mouth and 2.8 mi northeast of Arlington.

DRAINAGE AREA.--1,470 mi^2, approximately.

PERIOD OF RECORD.--Water years 1961-77 (annual maximums only), October 1977 to current year (discharge above 500 ft^3/s only).

GAGE.--Water-stage recorder. Datum of gage is 822.68 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 2, 1984 at datum 9.23 ft higher.

REMARKS.--No estimated daily discharges. Records poor. Only daily discharges above 500 ft^3/s are published. Records do not include irrigation return flow past station except where it cannot be separated from natural flow. Small diversions above station for irrigation and livestock.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,000 ft^3/s Sept. 5, 1970, gage height, 8.40 ft, result of slope-area measurement of peak flow; no natural flow for most of time each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,800 ft^3/s Nov. 1, gage height, 7.79 ft; no natural flow for most of year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1380	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	---
MEAN	---	---	---	---	---	---	---	---	---	---	---	---
MAX	---	---	---	---	---	---	---	---	---	---	---	---
MIN	---	---	---	---	---	---	---	---	---	---	---	---
AC-FT	---	---	---	---	---	---	---	---	---	---	---	---

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, AZ
(National stream-quality accounting network)

LOCATION.--Lat 33°13'45", long 112°46'00", in SE¼NE¼ sec.28, T.2 S., R.5 W., Maricopa County, Hydrologic Unit 15070101, at Gillespie Dam, 8 mi downstream from Hassayampa River. Gila Bend Canal diverts from left end, and Enterprise Canal diverts from right end, of Gillespie Dam.

DRAINAGE AREA.--49,650 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1935 to November 1939 (monthly discharge only published in WSP 1313), December 1939 to September 1971 (published with records for sta 09519500, Gila River below Gillespie Dam), 1972 and 1973 (water year estimates only, listed in REMARKS for sta 09519500), October 1973 to current year. Low-flow records prior to October 1970 are not equivalent as leakage less than 5 ft^3/s is not included.

09518500. Gila Bend Canal: May 1935 to September 1971, October 1973 to current year (since October 1941, monthly discharge only).

09519000. Enterprise Canal: June 1935 to September 1939 (discharge measurements and monthly estimates only), October 1939 to September 1971, April 1974 to current year (since October 1941, monthly discharge only). Published as "Gillespie Canal" prior 1951.

GAGE.--Gila Bend Canal: Water-stage recorder 200 ft downstream from headgates.
Enterprise Canal: Water-stage recorder 600 ft downstream from intake at dam.

REMARKS.--Records good except for estimated discharges, which are fair. Record is obtained by combining, on a daily basis, the flows of Gila Bend Canal, Enterprise Canal, and Gila River below Gillespie Dam (see sta 09519500).

Many large diversions above station for irrigation, municipal, and industrial use. Flow of Gila River and tributaries above this station is regulated: by San Carlos Reservoir on Gila River - capacity, 1,073,600 acre-ft; by a series of reservoirs on Salt River - capacity, 1,755,000 acre-ft; by Bartlett and Horseshoe Reservoirs on Verde River - capacity, 317,700 acre-ft; and by Lake Pleasant on Agua Fria River - capacity, 157,600 acre-ft.

AVERAGE DISCHARGE.--53 years, 401 ft^3/s, 290,500 acre-ft/yr; median of yearly mean discharges, 120 ft^3/s, 86,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 124,000 ft^3/s Feb. 17, 1980; no flow except for possible leakage of less than 5 ft^3/s Nov. 24-27, 1966, July 14, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 988 ft^3/s Dec. 26; minimum daily, 16 ft^3/s Nov. 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	678	269	896	372	364	e191	416	e172	e87	e122	e131
2	135	392	258	915	336	375	e214	344	e141	e78	e129	e95
3	159	29	238	885	332	374	e190	e287	e145	e83	e110	e91
4	173	23	252	524	371	398	e188	e297	e136	e91	e93	e106
5	216	121	276	347	333	e378	e189	e239	e133	e95	e94	e108
6	162	22	268	366	342	e325	e182	e192	e132	e89	e100	e97
7	151	16	280	328	355	e356	e182	e178	e85	e79	e116	96
8	161	19	273	317	362	e324	e186	e183	e84	e76	e142	103
9	221	25	275	323	314	e334	e182	e201	e89	e65	e140	112
10	212	29	281	325	331	e335	e164	e202	e86	e87	e120	123
11	201	35	302	344	321	e325	e162	e193	e85	e103	e116	132
12	167	40	304	323	e319	e332	e149	e166	e100	e109	e119	138
13	175	47	279	327	e314	348	e144	e158	e100	e85	e121	140
14	193	56	297	330	e313	342	e142	e147	e100	e96	e138	147
15	210	57	348	324	e313	e281	e142	e151	e87	e110	e154	152
16	194	70	354	329	e299	e289	e145	e147	e104	e95	e145	150
17	197	93	292	363	e290	e285	e164	e143	e100	e87	e118	e146
18	193	117	546	387	e292	e283	e180	e115	e78	e100	e106	e149
19	202	137	458	358	e290	e272	e186	e126	e90	e83	e81	e167
20	215	146	555	432	e295	e266	e184	e138	e100	e80	e105	e171
21	211	152	621	405	e295	e247	e200	e137	e86	e66	e244	e129
22	211	135	637	465	e296	e242	e219	e133	e86	e60	e285	e101
23	200	171	631	432	e286	e230	e236	e142	e79	e66	e245	121
24	223	161	747	402	e271	e204	e256	e138	e62	e70	e227	122
25	251	181	951	451	e272	e206	e269	e126	e71	e86	e222	119
26	261	187	988	436	e240	e189	e236	e148	e78	e78	e211	184
27	281	175	897	401	e235	e179	e196	e139	e85	e53	e207	191
28	275	331	954	396	e334	e225	e182	e119	e79	e64	e205	257
29	271	232	986	391	403	e235	309	e99	e74	e74	e195	244
30	288	264	946	348	---	e237	474	e125	e80	e82	e180	226
31	228	---	880	375	---	e204	---	e155	---	e88	e180	---
TOTAL	6372	4141	15643	13245	9126	8984	6043	5484	2927	2575	4770	4248
MEAN	206	138	505	427	315	290	201	177	97.6	83.1	154	142
MAX	288	678	988	915	403	398	474	416	172	110	285	257
MIN	135	16	238	317	235	179	142	99	62	60	81	91
AC-FT	12640	8210	31030	26270	18100	17820	11990	10880	5810	5110	9460	8430
(*)	1040	498	10780	13480	15350	15040	10310	9550	5200	4570	7890	3630
(**)	891	166	446	666	611	832	726	783	597	541	561	669

CAL YR 1987 TOTAL 91733 MEAN 251 MAX 1520 MIN 16 AC-FT 182000 (*) 96600 (**) 9210
WTR YR 1988 TOTAL 83558 MEAN 228 MAX 988 MIN 16 AC-FT 165700 (*) 97350 (**) 7490

e Estimated
(*) Diversions, in acre-feet, to Gila Bend Canal (sta 09518500). See remarks above. For records prior to 1972, see sta 09519500.
(**) Diversions, in acre-feet, to Enterprise Canal (sta 09519000). For records prior to 1972, see sta 09519500.

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1950 to September 1971, March 1974 to current year.
Prior to October 1967, published as 09519500, Gila River below Gillespie Dam, Ariz.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1964 to September 1971, April 1974 to September 1981.
WATER TEMPERATURES: December 1950 to September 1971, April 1974 to September 1981.

REMARKS.--Unpublished daily specific conductance measurements for period December 1950 to September 1964 available from district office in Tucson, Ariz.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
OCT 1987												
20...	1040	213	3490	8.05	32.0	20.0	23	741	7.6	87	120	770
NOV												
18...	1000	113	3430	8.08	22.0	13.5	52	750	8.5	84	50	1500
DEC												
17...	1010	291	3600	7.91	10.5	11.0	14	738	7.0	66	76	1000
JAN 1988												
29 ..	1020	396	3700	7.96	15.5	14.0	5.9	745	6.3	64	33	1900
FEB												
23...	1040	288	3540	7.80	14.5	14.0	13	744	5.8	59	17	870
MAR												
15...	0930	279	3600	7.99	10.0	13.5	18	740	5.5	55	15	K3400
APR												
27...	1055	187	4000	8.12	26.5	21.0	33	739	6.2	73	18	340
MAY												
25...	0910	115	4730	8.47	28.0	27.0	34	740	7.1	94	73	100
JUN												
30...	1000	77	4870	8.19	36.0	26.0	37	743	5.8	74	15	830
JUL												
15...	1045	114	4730	8.38	38.0	26.5	32	740	7.5	98	30	830
AUG												
24...	0915	247	3210	7.86	30.0	29.0	50	747	4.2	57	*230	3800
SEP												
23...	1015	119	3930	8.18	25.0	21.0	45	743	8.4	98	26	490

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT 1987												
20...	320	610	390	140	62	460	8	11	314	0	0	257
NOV												
18...	1600	570	360	130	60	470	9	12	332	0	0	272
DEC												
17...	2700	600	380	140	61	460	8	16	348	0	0	285
JAN 1988												
29...	1200	640	420	150	65	500	9	12	307	0	0	252
FEB												
23...	760	660	430	150	69	530	9	11	359	0	0	294
MAR												
15...	2300	630	400	140	67	500	9	12	316	0	0	259
APR												
27...	680	720	470	170	72	590	10	13	351	0	0	288
MAY												
25...	120	770	500	180	79	760	12	10	295	20	0	276
JUN												
30...	260	1100	910	250	110	750	10	10	349	0	0	286
JUL												
15...	1200	900	680	210	91	710	11	9.5	266	24	0	258
AUG												
24...	1100	560	350	130	56	430	8	10	234	0	0	192
SEP												
23...	360	590	360	140	59	610	11	11	312	0	0	256

* Value verified.
K Based on non-ideal colony count.

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, AZ--Continued

WATER QUALITY DATA

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT 1987 20...	360	--	2.0	20	2000	--	--	43	6.20	1.10	7.40	7.30
NOV 18...	400	670	1.7	--	1960	1870	2.67	123	--	--	6.30	--
DEC 17...	430	650	1.9	27	2110	1970	2.87	23	6.11	0.490	6.30	6.60
JAN 1988 29...	400	810	1.8	--	2120	2070	2.88	27	--	--	6.70	--
FEB 23...	430	830	1.8	23	2200	2240	2.99	32	6.80	1.00	7.20	7.80
MAR 15...	390	630	1.9	--	2140	1880	2.91	54	--	--	7.20	--
APR 27...	540	820	1.9	23	2450	2430	3.33	101	8.40	1.20	*4.80	*9.60
MAY 25...	680	1000	2.2	--	2950	2880	4.01	85	--	--	1.70	--
JUN 30...	690	1000	0.20	28	3130	3070	4.26	35	14.4	0.550	13.0	15.0
JUL 15...	720	990	2.1	--	3010	2870	4.09	98	--	--	14.0	--
AUG 24...	400	690	1.3	25	1960	1900	2.67	100	5.82	0.680	7.40	6.50
SEP 23...	500	860	1.9	--	2410	2320	3.28	100	--	--	8.60	--

DATE	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P) (00673)
OCT 1987 20...	4.70	4.50	4.8	9.5	17	75	2.50	2.70	2.60	8.0	2.5	0.10
NOV 18...	7.90	--	--	--	--	--	4.00	--	--	--	4.0	--
DEC 17...	8.60	8.40	1.4	10	16	72	3.30	3.20	2.60	8.0	3.3	0.60
JAN 1988 29...	8.00	--	2.0	10	17	74	3.30	--	--	--	3.3	--
FEB 23...	*1.10	*7.00	7.7	8.8	16	71	2.70	2.70	2.30	7.1	2.7	0.40
MAR 15...	5.20	--	1.0	6.2	13	59	2.20	--	--	--	2.2	--
APR 27...	1.40	1.30	1.4	2.8	7.6	34	1.80	1.80	1.10	3.4	1.8	0.70
MAY 25...	0.150	--	0.95	1.1	2.8	12	1.10	--	--	--	1.1	--
JUN 30...	0.890	0.880	1.0	1.9	15	66	1.30	0.760	0.690	2.1	1.3	0.07
JUL 15...	0.060	--	2.4	2.5	16	73	0.900	--	--	--	0.90	--
AUG 24...	1.40	1.40	2.0	3.4	11	48	1.40	1.40	1.20	3.7	1.4	0.20
SEP 23...	2.60	--	0.50	3.1	12	52	2.10	--	--	--	2.1	--

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 1987 20...	<10	11	11	100	<10	1400	<1	<1	1	3	1	18
NOV 18...	--	10	9	<100	--	1300	<1	<1	14	2	--	30
DEC 17...	--	9	9	100	--	1500	<1	<1	8	4	--	9
JAN 1988 29...	--	9	9	200	--	1200	1	<1	5	3	--	9
FEB 23...	20	9	8	200	<10	1400	<1	1	4	2	<1	12
MAR 15...	--	9	7	200	--	1400	<1	1	5	2	--	10
APR 27...	<10	11	10	100	<10	1700	1	<1	7	<1	<1	13
MAY 25...	--	6	7	<100	--	2200	<1	1	6	2	--	11
JUN 30...	--	8	7	<100	--	2300	<1	<1	6	3	--	14
JUL 15...	--	11	11	<100	--	2100	<1	<1	7	3	--	13
AUG 24...	10	11	11	<100	<10	1400	<1	<1	6	<1	<1	12
SEP 23...	--	9	8	<100	--	1700	<1	<1	9	3	--	14

* Value verified.
< Actual value is known to be less than value shown.

09518000 GILA RIVER ABOVE DIVERSIONS, AT GILLESPIE DAM, AZ--Continued

WATER QUALITY DATA

DATE	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)
OCT 1987											
20...	4	1500	10	<5	<5	190	120	40	<0.10	0.2	7
NOV											
18...	7	7000	10	12	<5	--	280	110	<0.10	--	--
DEC											
17...	6	760	20	<5	<5	--	100	60	<0.10	--	--
JAN 1988											
29...	7	720	20	<5	5	--	170	130	<0.10	--	--
FEB											
23...	4	550	40	<5	<5	190	150	140	<0.10	<0.1	8
MAR											
15...	5	880	20	5	<5	--	170	130	<0.10	--	--
APR											
27...	5	9600	30	<5	<5	220	250	130	<0.10	<0.1	10
MAY											
25...	2	2500	30	<5	<5	--	210	50	<0.10	--	--
JUN											
30...	2	2400	20	<5	<5	--	170	30	<0.10	--	--
JUL											
15...	3	2500	20	<5	<5	--	160	20	<0.10	--	--
AUG											
24...	2	3000	20	<5	<5	160	140	40	0.10	<0.1	6
SEP											
23...	4	220	20	<5	<5	--	150	50	0.10	--	--

DATE	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 1987											
20...	12	3	3	<1.0	2300	22	20	30	100	63	36
NOV											
18...	--	2	3	<1.0	--	--	30	<10	93	289	88
DEC											
17...	--	3	3	<1.0	--	--	10	<10	85	38	30
JAN 1988											
29...	--	2	2	1.0	--	--	20	20	99	27	29
FEB											
23...	13	3	4	<1.0	2500	23	20	10	100	32	25
MAR											
15..	--	3	3	<1.0	--	--	10	10	100	59	44
APR											
27...	6	4	5	<1.0	2600	29	40	20	100	115	58
MAY											
25...	--	7	6	<1.0	--	--	30	20	100	124	39
JUN											
30...	--	9	7	<1.0	--	--	40	30	99	128	27
JUL											
15...	--	7	7	<1.0	--	--	20	<10	100	107	33
AUG											
24...	8	3	3	<1.0	1900	26	<10	<10	100	228	152
SEP											
23...	--	4	4	1.0	--	--	20	<10	88	172	55

< Actual value is known to be less than value shown.

09519500 GILA RIVER BELOW GILLESPIE DAM, AZ

LOCATION.--Lat 33°13'45", long 112°46'00", in SE¼NE¼ sec.28, T.2 S., R.5 W., Maricopa County, Hydrologic Unit 15070101, at left end of Gillespie Dam, 8 mi downstream from Hassayampa River.

DRAINAGE AREA.--49,650 mi^2.

PERIOD OF RECORD.--August 1921 to current year. Low-flow records prior to October 1970 are not equivalent as leakage of less than 5 ft^3/s not included, and from October 1971 to September 1973, when no leakage was included. Annual estimate of leakage was listed in REMARKS for the 1972 water year. Prior to 1939, published as "at Gillespie Dam."

REVISED RECORDS.--WSP 1213: 1939. WSP 1243: 1924(M). WSP 1926: Drainage area.

GAGE.--Water-stage recorder since July 28, 1924. Datum of gage is 9.95 ft below average elevation of crest of dam, which is 753.46 ft above National Geodetic Vertical Datum of 1929. Prior to Nov. 11, 1924, depth of water read on crest at left end of dam. Nov. 11, 1924, to July 22, 1932, datum of gage was at average elevation of dam crest. July 23, 1932, to Apr. 27, 1955, datum of gage was 5.00 ft below average elevation of crest of dam. Apr. 2, 1974 to Jan. 31, 1986, supplementary water-stage recorder and concrete control 70 ft downstream from crest of dam at datum 5.64 ft lower than datum of base gage. Since Jan. 31, 1986, supplementary water-stage recorder at bridge 0.1 mi downstream at different datum.

REMARKS.--Records poor. Flow consists of water passing over the dam, and seepage through the dam, but does not include water diverted to Gila Bend or Enterprise Canals. See sta 09518000, Gila River above diversions, at Gillespie Dam, for records of flow reaching dam, and of diversions to Gila Bend and Enterprise Canals For diversions and regulation above station, see REMARKS for sta 09518000.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 178,000 ft^3/s Feb. 16, 1980, gage height, 18.81 ft, present datum; no flow at times.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1891, 250,000 ft^3/s, estimated, in February 1891.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 980 ft^3/s Dec. 29; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	653	85	893	91	83	e7.8	149	e.00	e.00	e.00	e20
2	97	377	76	906	61	88	e8.2	75	e.00	e.00	e.00	e18
3	121	21	36	870	49	89	e8.6	e21	e.00	e.00	e.00	e15
4	141	19	23	365	95	108	e8.6	e28	e.00	e.00	e.00	e13
5	198	119	24	86	53	e98	e8.9	e.00	e.00	e.00	e.00	e11
6	150	20	23	101	61	e43	e8.6	e.00	e.00	e.00	e.00	e11
7	140	14	24	56	72	e67	e8.2	e.00	e.00	e.00	e.00	11
8	150	17	23	45	84	e41	e7.8	e.00	e.00	e.00	e.00	16
9	208	23	20	47	41	e45	e7.4	e.00	e.00	e.00	e.00	21
10	199	27	19	52	47	e47	e7.0	e.00	e.00	e.00	e.00	26
11	189	33	42	68	37	e41	e6.6	e.00	e.00	e.00	e.00	31
12	152	38	46	56	e33	e43	e6.2	e.00	e.00	e.00	e.00	36
13	158	45	29	46	e30	60	e5.8	e.00	e.00	e.00	e.00	41
14	176	54	37	51	e27	57	e5.4	e.00	e.00	e.00	e.00	46
15	192	55	83	42	e24	e1.0	e5.0	e.00	e.00	e.00	e.00	51
16	176	68	93	48	e21	e1.4	e4.6	e.00	e.00	e.00	e.00	52
17	179	91	31	81	e18	e1.8	e4.2	e.00	e.00	e.00	e.00	e48
18	175	115	272	120	e15	e2.2	e3.8	e.00	e.00	e.00	e.00	e47
19	172	135	199	84	e12	e2.6	e3.4	e.00	e.00	e.00	e.00	e59
20	161	144	305	177	e9.0	e3.0	e3.0	e.00	e.00	e.00	e.00	e67
21	159	150	434	151	e6.0	e3.4	e7.6	e.00	e.00	e.00	e88	e50
22	159	133	488	244	e5.0	e3.8	e2.2	e.00	e.00	e.00	e109	e72
23	150	169	509	247	e1.0	e4.2	e1.8	e.00	e.00	e.00	e61	104
24	171	159	624	173	e1.0	e4.6	e1.4	e.00	e.00	e.00	e41	105
25	199	179	844	222	e1.0	e5.0	e1.0	e.00	e.00	e.00	e38	103
26	209	183	965	230	e1.0	e5.4	e1.0	e.00	e.00	e.00	e36	150
27	229	148	886	193	e1.0	e5.8	e1.0	e.00	e.00	e.00	e33	154
28	224	292	946	163	e60	e6.2	e1.0	e.00	e.00	e.00	e31	242
29	223	188	980	133	125	e6.6	120	e.00	e.00	e.00	e28	238
30	251	132	941	69	---	e7.0	212	e.00	e.00	e.00	e25	220
31	196	---	876	97	---	e7.4	---	e.00	---	e.00	e23	---
TOTAL	5401	3801	9983	6116	1081.0	981.4	478.1	273.00	0.00	0.00	513.00	2078
MEAN	174	127	322	197	37.3	31.7	15.9	8.81	.00	.00	16.5	69.3
MAX	251	653	980	906	125	108	212	149	.00	.00	109	242
MIN	97	14	19	42	1.0	1.0	1.0	.00	.00	.00	.00	11
AC-FT	10710	7540	19800	12130	2140	1950	948	541	.0	.0	1020	4120

CAL YR 1987 TOTAL 38385.22 MEAN 105 MAX 1220 MIN .00 AC-FT 76140
WTR YR 1988 TOTAL 30705.50 MEAN 83.9 MAX 980 MIN .00 AC-FT 60900

e Estimated

09519800 GILA RIVER BELOW PAINTED ROCK DAM, AZ

LOCATION.--Lat 33°04'30", long 113°00'50", in SE¼ sec.18, T.4 S., R.7 W., Maricopa County, Hydrologic Unit 15070201, on left bank 0.3 mi downstream from Painted Rock Dam and 19 mi northeast of Sentinel.

DRAINAGE AREA.--50,910 mi^2, approximately.

PERIOD OF RECORD.--October 1959 to current year.

GAGE.--Water-stage recorder. Datum of gage is 518.69 ft above National Geodetic Vertical Datum of 1929 (levels by Army Corps of Engineers). Auxiliary gage May 5, 1969, to Mar. 30, 1973, at site 0.3 mi upstream, at datum 2.87 ft higher; Feb. 8, 1979 to current year, at site 0.3 mi upstream, at same datum.

REMARKS.--No estimated daily discharges. Records fair. Many diversions above station for irrigation. Flow above station regulated by many reservoirs, the largest of which is Painted Rock Reservoir - capacity, 2,492,000 acre-ft. (See REMARKS for sta 09518000, Gila River above diversions, at Gillespie Dam.)

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,190 ft^3/s, result of a discharge measurement May 3, 1983, gage height, 9.36 ft, maximum gage height, 10.57 ft Feb. 9, 1979; no flow for many days in most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 72 ft^3/s, Feb. 17; no flow for many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	12	1.9	15	6.1	11	.09	.00	.00	.00
2	.00	.00	.00	11	1.3	15	6.0	9.9	.01	.00	.00	.00
3	.00	.00	.00	10	1.1	16	6.3	10	.00	.00	.00	.00
4	.00	.00	.00	9.6	.97	16	6.3	10	.00	.00	.00	.00
5	.00	.00	.00	9.2	.84	16	6.1	9.9	.00	.00	.00	.00
6	.00	.00	.00	8.8	.70	13	6.1	9.7	.00	.00	.00	.00
7	.00	.00	1.0	6.6	.58	12	6.4	9.5	.00	.00	.00	.00
8	.00	.00	2.4	9.6	.47	11	6.6	9.5	.00	.00	.00	.00
9	.00	.00	2.2	11	.37	11	6.4	9.5	.00	.00	.00	.00
10	.00	.00	4.0	13	.34	11	6.1	10	00	.00	.00	.00
11	.00	.00	4.9	16	.32	11	5.0	10	.00	.00	.00	.00
12	.00	.00	5.2	17	.29	11	4.2	8.8	.00	.00	.00	.00
13	.00	.00	6.0	18	.28	11	4.0	7.6	.00	.00	.00	.00
14	.00	.00	7.0	18	.28	12	3.9	6.6	.00	.00	.00	.00
15	.00	.00	7.9	19	.26	12	3.9	5.9	.00	.00	.00	.00
16	.00	.00	7.3	20	27	12	4.0	5.2	.00	.00	.00	.00
17	.00	.00	6.7	21	72	11	4.4	4.5	.00	.00	.00	.00
18	.00	.00	11	23	41	11	5.8	3.8	.00	.00	.00	.00
19	.00	.00	15	23	29	9.5	6.5	3.3	.00	.00	.00	.00
20	.00	.00	14	22	23	8.3	6.1	2.8	.00	.00	.00	.00
21	.00	.00	13	18	21	6.9	6.5	2.2	.00	.00	.00	.00
22	.00	.00	11	14	21	6.5	7.5	1.8	.00	.00	.00	.00
23	.00	.00	11	12	22	6.5	8.9	1.3	.00	.00	.15	.00
24	.00	.00	11	10	22	6.5	9.9	1.1	.00	.00	.00	.00
25	.00	.00	13	9.2	22	6.1	11	.97	.00	.00	.00	.00
26	.00	.00	14	8.1	22	6.2	13	.85	.00	.00	.00	.00
27	.00	.00	16	7.6	20	6.4	13	.73	.00	.00	.00	.00
28	.00	.00	16	7.1	18	6.3	12	.61	.00	.00	.00	.00
29	.00	.00	15	6.6	16	5.8	12	.46	.00	.00	.00	.00
30	.00	.00	14	4.5	---	6.3	11	.28	.00	.00	.00	.00
31	.00	---	13	2.9	---	6.4	---	.18	---	.00	.00	---
TOTAL	0.00	0.00	241.60	399.8	386.00	314.7	215.0	167.98	0.10	0.00	0.15	0.00
MEAN	.00	.00	7.79	12.9	13.3	10.2	7.17	5.42	.003	.00	.005	.00
MAX	.00	.00	16	23	72	16	13	11	.09	.00	.15	.00
MIN	.00	.00	.00	2.9	.26	5.8	3.9	.18	.00	.00	.00	.00
AC-FT	.0	.0	479	793	766	624	426	333	.2	.0	.3	.0

CAL YR 1987 TOTAL 4684.46 MEAN 12.8 MAX 47 MIN .00 AC-FT 9290
WTR YR 1988 TOTAL 1725.33 MEAN 4.71 MAX 72 MIN .00 AC-FT 3420

09520360 GILA RIVER NEAR MOHAWK, AZ

LOCATION.--Lat 32°47'18", long 113°45'48", on section line between sec.25 and 26, T.7 S., R.15 W., Yuma County, Hydrologic Unit 15070201, in center of channel at culvert outlet at Avenue 51E, and 4.0 mi north of Mohawk.

DRAINAGE AREA.--55,430 mi^2, approximately.

PERIOD OF RECORD.--February to April 1966 (published in WSP 1850-C), April 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 295 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to March 1983 at site 70 ft upstream at datum 6.45 ft higher.

REMARKS.-No estimated daily discharges. Records good. Flow regulated by Painted Rock Dam; capacity of reservoir at Painted Rock Dam is 2,492,000 acre-ft, (see REMARKS for sta 09519800).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,270 ft^3/s Apr. 30, 1980, gage height, 11.28 ft, site and datum then in use; maximum gage height, 14.20 ft June 7, 8, 1983, present site and datum; no flow most of time most years.

EXTREMES FOR CURRENT YEAR.--No flow for entire year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MEAN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	.0	.0	.0	.0	.0	.0	.0	.0	0	.0	.0

CAL YR 1987 TOTAL 0.00 MEAN .00 MAX .00 MIN .00 AC-FT .0
WTR YR 1988 TOTAL 0.00 MEAN .00 MAX .00 MIN .00 AC-FT .0

09520500 GILA RIVER NEAR DOME, AZ

LOCATION.--Lat 32°45'39", long 114°25'11", in SW¼ sec.4, T.8 S., R.21 W., Yuma County, Hydrologic Unit 15070201, on right bank 440 ft upstream from McPhal bridge on old route of State Highway 95, 3 mi west of Dome, and 12 mi upstream from mouth.

DRAINAGE AREA.--57,850 mi^2, approximately - includes 373 mi^2 in Aubrey Valley Playa, a closed basin, but excludes all other closed basins.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1903 to current year. Monthly total, maximum, and minimum daily discharges only for January 1903 to December 1904 and January 1906 to July 1929 in WSP 918 or WSP 1313. Published as "at Yuma and Gila City" 1903, as "near Dome" 1904, and as "at Dome (Gila City)" 1905-6. Records for 1907-29 are published in WSP 918 as "at Yuma and at and near Dome."

REVISED RECORDS.--WSP 918: 1905. WSP 1733: July 1942. WSP 1926: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 139.18 ft above National Geodetic Vertical Datum of 1929. Prior to October 1903 and January 1907 to April 1929, no gage; discharge estimated. October 1903 to December 1906, principal nonrecording gage 4 mi upstream at datum 19.19 ft higher, supplemented by many nonrecording gages at different datums. May 1929 to May 31, 1981, at datum 9.00 ft higher.

REMARKS.--Records poor. Many diversions above station for irrigation. Flow above station regulated by reservoirs at and above Painted Rock Dam; capacity of reservoir at Painted Rock Dam is 2,492,000 acre-ft. Painted Rock Reservoir, which is for flood control only, was completed in October 1959 (see also REMARKS for sta 09518000).

EXTREMES FOR PERIOD OF RECORD.--1903-29: Maximum daily discharge, 200,000 ft^3/s, roughly estimated, Jan. 22, 1916.
1929-59: Maximum discharge, 20,700 ft^3/s Feb. 15, 1932, gage height, 25.75 ft, present datum; no flow for part or all of most years.
1959-88: Maximum discharge, 4,820 ft^3/s Sept. 18, 1963, gage height, 16.20 ft; no flow for part or all of most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 238 ft^3/s Feb. 18, gage height, 11.52 ft; minimum daily, 0.10 ft^3/s Aug. 4-23, 25-27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	43	4.5	e4.9	13	14	17	3.5	e1.3	e1.8	e.30	e4.0
2	3.4	4.6	2.9	5.5	12	17	15	25	e1.3	e1.8	e.30	e4.0
3	3.7	4.1	3.5	5.4	12	15	17	4.5	e1.4	e1.7	e.20	e4.0
4	6.8	3.7	3.5	5.6	12	14	35	3.8	e1.4	e1.7	e.10	e4.0
5	4.0	3.2	2.7	5.3	13	e12	13	3.4	e1.4	e1.6	e.10	e6.0
6	3.5	2.8	5.5	5.3	13	e12	11	19	e1.4	e1.6	e.10	e6.0
7	5.3	2.8	4.6	5.0	13	e13	10	4.9	e1.4	e1.5	e.10	e6.0
8	5.2	3.8	3.6	4.9	12	e13	9.9	4.4	e1.4	e1.5	e.10	e6.0
9	4.0	4.1	2.8	e5.0	12	19	8.3	3.5	e1.5	e1.4	e.10	e6.0
10	3.9	3.0	2.8	e5.5	12	16	7.7	4.3	e1.5	e1.4	e.10	e6.0
11	10	3.2	3.0	e6.0	14	21	7.1	3.3	e1.5	e1.3	e.10	e6.0
12	8.3	4.7	2.3	6.3	14	20	6.8	3.0	e1.5	e1.3	e.10	e6.0
13	13	6.4	2.6	6.0	14	19	6.5	3.7	e1.5	e1.2	e.10	e6.0
14	12	4.6	3.9	6.2	13	42	e7.0	2.2	e1.5	e1.2	e.10	e6.0
15	13	4.0	3.0	6.6	14	14	e7.5	1.8	e1.6	e1.1	e.10	e6.0
16	12	4.8	5.5	6.5	13	14	e8.0	1.6	e1.6	e1.1	e.10	e6.0
17	8.8	3.0	7.5	8.0	12	16	8.2	2.9	e1.6	e1.0	e.10	e7.0
18	6.6	3.1	3.6	9.1	38	15	52	2.8	e1.6	e1.0	e.10	e7.0
19	6.0	3.0	4.0	17	26	37	7.7	3.1	e1.6	e.90	e.10	e7.0
20	9.0	6.2	5.6	16	12	15	6.5	8.9	e1.6	e.90	e.10	e7.0
21	8.7	2.9	5.5	15	11	19	6.9	17	e1.7	e.90	e.10	e7.0
22	8.7	2.7	4.9	13	12	19	7.2	17	e1.7	e.80	e.10	e7.0
23	11	3.4	4.4	13	11	19	7.4	17	e1.7	e.80	e.10	7.8
24	34	2.4	5.1	14	13	17	6.6	17	e1.7	e.70	e5.0	6.5
25	7.5	2.5	4.8	13	12	16	5.8	17	e1.7	e.70	e.10	6.4
26	4.5	4.6	5.2	13	15	26	5.2	12	e1.8	e.60	e.10	5.7
27	4.1	2.9	4.9	13	12	25	4.0	3.1	e1.8	e.60	e.10	4.5
28	6.4	3.6	5.1	12	14	14	3.9	3.1	e1.8	e.50	e6.0	4.2
29	4.4	4.1	4.8	14	15	13	3.9	6.7	e1.8	e.50	e49	5.9
30	3.6	3.6	5.2	13	---	14	3.8	2.3	e1.8	e.40	e10	4.6
31	14	---	4.9	13	---	16	---	1.6	---	e.40	e5.0	---
TOTAL	249.0	150.8	132.2	286.1	409	556	315.9	223.4	47.1	33.90	78.10	175.6
MEAN	8.03	5.03	4.26	9.23	14.1	17.9	10.5	7.21	1.57	1.09	2.52	5.85
MAX	34	43	7.5	17	38	42	52	25	1.8	1.8	49	7.8
MIN	3.4	2.4	2.3	4.9	11	12	3.8	1.6	1.3	.40	.10	4.0
AC-FT	494	299	262	567	811	1100	627	443	93	67	155	348

CAL YR 1987 TOTAL 4161.4 MEAN 11.4 MAX 186 MIN 1.2 AC-FT 8250
WTR YR 1988 TOTAL 2657.10 MEAN 7.26 MAX 52 MIN .10 AC-FT 5270

e Estimated

09520500 GILA RIVER NEAR DOME, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1983 to September 1986.
WATER TEMPERATURE: October 1983 to September 1986.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 1987										
01...	0900	4.6	7700	7.90	29.5	22.0	--	766	7.6	89
14...	0845	E3.0	4450	7.80	22.0	20.0	1.4	765	7.2	80
NOV										
04...	0945	3.0	5900	7.60	19.0	18.5	--	765	8.4	91
18...	0830	2.7	5500	7.70	16.5	14.0	2.9	769	8.2	80
DEC										
02...	0930	2.6	5500	7.60	13.5	11.5	--	769	10.0	93
16...	0855	2.7	3250	7.60	11.5	7.5	2.9	765	10.3	87
JAN 1988										
07...	1030	4.1	7700	7.70	14.0	8.5	--	770	10.5	91
20...	1010	9.6	2180	7.95	13.5	6.0	4.6	775	11.3	90
FEB										
04...	0930	10	5500	7.80	16.5	11.0	--	771	9.2	84
17...	0830	13	5500	7.80	14.0	10.5	3.4	770	8.8	80
MAR										
02...	1000	28	2950	7.80	18.0	16.0	--	763	8.6	88
16...	0915	13	4350	7.90	16.5	14.0	2.7	767	9.5	93
APR										
07...	1150	12	5900	7.60	29.0	23.0	--	766	10.3	122
20...	1300	6.7	5800	8.00	28.5	23.0	0.90	761	13.4	159
MAY										
05...	1240	3.5	7100	7.90	26.0	24.0	--	765	14.8	179
19...	0830	3.8	3800	7.70	27.0	23.5	1.0	762	8.2	98
JUN										
01...	1330	1.2	7600	7.80	41.0	29.0	--	765	10.4	138
15...	1315	E0.50	5000	8.00	36.0	33.0	1.0	765	10.8	152
JUL										
07...	1200	E0.30	2570	8.00	37.0	35.0	--	764	12.5	181
20...	1020	E0.50	5100	7.80	35.0	28.5	18	765	8.4	110
AUG										
03...	1345	0.0	--	--	--	--	--	--	--	--
17...	1330	0.0	--	--	--	--	--	--	--	--
SEP										
06...	1030	3.5	9180	8.10	35.5	28.0	--	763	9.0	118
21...	1245	3.5	5000	7.90	26.5	27.0	4.5	765	13.3	169

E Estimated

09520500 GILA RIVER NEAR DOME, AZ--Continued

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
OCT 1987									
01...	--	--						--	--
14...	38	1100	1100	[illegible]	[illegible]	510	7	9.0	279
NOV									
04...	--	--	--				--	--	--
18...	290	2000	2000	[illegible]	[illegible]	[illegible]	7	9.2	283
DEC									
02...	--	--	--					--	--
16...	19	770	770	[illegible]	[illegible]	[illegible]	6	6.7	246
JAN 1988									
07...	--	--	--				--	--	--
20...	<10	380	360	[illegible]	[illegible]	[illegible]	7	7.3	162
FEB									
04...	--	--	--				--	--	--
17...	110	--	--			920	--	1.9	342
MAR									
02...	--	--					--	--	--
16...	120	710	710	[illegible]	76	590	10	8.3	281
APR									
07...	--						--	--	--
20...	53	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	9.9	239
MAY									
05...	--	--	--	--	--	--	--	--	--
19...	39	720	720	[illegible]	77	480	8	5.2	212
JUN									
01...	--	--	--	--	--	--	--	--	--
15...	24	1200	1200	[illegible]	12[illegible]	620	8	11	232
JUL									
07...	--	--					--	--	--
20...	57	[illegible]	[illegible]	[illegible]	[illegible]	590	7	9.1	210
AUG									
03...	--						--	--	--
17...	--	--					--	--	--
SEP									
06...	--	--					--	--	--
21...	32	840	84[illegible]	[illegible]	[illegible]	570	9	11	342

DATE	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1987									
01...						4940	--	--	5
14...	[illegible]	229	480	[illegible]	0.40	2520	2310	3.43	7
NOV									
04...						3470	--	--	14
18...	0	232	[illegible]	[illegible]	0.40	3470	3470	4.72	7
DEC									
02...						5190	--	--	5
16...	0	202	360	[illegible]	0.40	1950	1820	2.65	6
JAN 1988									
07...						4990	--	--	3
20...	0	[illegible]	[illegible]	[illegible]	0.55	1260	1260	1.71	11
FEB									
04...						3460	--	--	8
17...	0	280	830	[illegible]	0.90	3750	--	--	7
MAR									
02...	--	--	--			1870	--	--	12
16...	0	230	850	740	0.70	2690	2220	3.66	7
APR									
07...	--	--	--	--	--	3640	--	--	10
20...	0	196	750	1300	0.60	3670	3290	4.99	<1
MAY									
05...	--		--		--	4410	--	--	11
19...	0	174	440	773	0.40	2290	1930	3.11	<1
JUN									
01...	--	--	--	--	--	4990	--	--	21
15...	0	190	510	1100	0.50	3050	2640	4.08	2
JUL									
07...	--	--	--	--	--	1610	--	--	7
20...	0	170	500	1200	0.40	3190	2730	4.34	92
AUG									
03...	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	--
SEP									
06...	--	--	--	--	--	5870	--	--	28
21...	0	280	460	1100	0.40	2820	2420	3.84	7

< Actual value is known to be less than value shown.

09520500 GILA RIVER NEAR DOME, AZ--Continued

WATER QUALITY DATA

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	BORON, DISSOLVED (UG/L AS B) (01020)
OCT 1987									
01...	<0.100	0.200	0.60	0.80	--	--	0.010	0.01	--
14...	<0.100	0.070	0.43	0.50	--	--	0.020	0.02	520
NOV									
04...	<0.100	0.260	0.54	0.80	--	--	<0.010	--	--
18...	<0.100	0.210	0.39	0.60	--	--	0.010	0.01	610
DEC									
02...	<0.100	0.310	0.49	0.80	--	--	0.010	0.01	--
16...	<0.100	0.100	0.30	0.40	--	--	0.020	0.02	340
JAN 1988									
07...	<0.100	0.260	0.44	0.70	--	--	0.040	0.04	--
20...	<0.100	0.030	0.77	0.80	--	--	0.030	0.03	440
FEB									
04...	<0.100	0.110	0.49	0.60	--	--	0.020	0.02	--
17...	<0.100	0.120	--	<0.20	--	--	0.030	0.03	1100
MAR									
02...	<0.100	0.040	0.56	0.60	--	--	0.020	0.02	--
16...	<0.100	0.040	0.46	0.50	--	--	0.020	0.02	820
APR									
07...	<0.100	0.070	0.63	0.70	--	--	0.020	0.02	--
20...	<0.100	0.090	0.51	0.60	--	--	0.020	0.02	1000
MAY									
05...	0.100	0.110	0.49	0.60	0.70	3.1	0.020	0.02	--
19...	<0.100	0.060	0.14	0.20	--	--	0.020	0.02	460
JUN									
01...	<0.100	0.170	0.33	0.50	--	--	0.020	0.02	--
15...	<0.100	0.070	0.53	0.60	--	--	0.020	0.02	610
JUL									
07...	<0.100	0.070	0.43	0.50	--	--	0.020	0.02	--
20...	<0.100	0.070	1.0	1.1	--	--	0.040	0.04	570
AUG									
03...	--	--	--	--	--	--	--	--	--
17...	--	--	--		--	--	--	--	--
SEP									
06...	<0.100	0.100	0.80	0.90	--	--	0.040	0.04	--
21...	<0.100	0.160	0.94	1.1	--	--	0.110	0.11	650

< Actual value is known to be less than value shown.

09521100 COLORADO RIVER BELOW YUMA MAIN CANAL WASTEWAY, AT YUMA, AZ

LOCATION.--Lat 32°43'54", long 114°37'55", in SW¼SW¼ sec.26, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on right bank 1,000 ft downstream from Yuma Main Canal wasteway, 0.6 mi downstream from former gaging station on Colorado River at Yuma, 1.1 mi northwest of downtown post office in Yuma, 5.2 mi downstream from Gila River, and 6.4 mi upstream from northerly international boundary.

DRAINAGE AREA.--246,500 mi^2, approximately, including all closed basins entirely within the drainage boundary, also 3,959 mi^2 in Great Divide basin in southern Wyoming.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to current year. If records for Yuma Main Canal wasteway at Yuma (sta 09525000) and Reservation Main Drain No. 4 (sta 09530000) are subtracted from records at this station, records equivalent to those published 1902-64 as "Colorado River at Yuma" (sta 09521000) can be obtained.

GAGE.--Water-stage recorder. Datum of gage is 101.93 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground water withdrawals and diversions for irrigation, municipal, and industrial uses, and return flows from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,600 ft^3/s Aug. 19, 1983, gage height, 26.67 ft; maximum gage height, 27.67 ft July 4, 1983; minimum daily discharge, 200 ft^3/s Jan. 17, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height since at least 1878, 34.0 ft Jan. 22, 1916, discharge, 250,000 ft^3/s, at former gaging station at Yuma.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,790 ft^3/s Oct. 13; minimum daily, 643 ft^3/s May 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2020	2720	1220	1540	[illegible]	[illegible]	[illegible]	1210	1080	1180	1350	1340
2	2030	2700	905	1540	[illegible]	[illegible]	1270	1070	1040	1520	1230	1870
3	1990	2760	1060	[illegible]	1450	1450	1540	845	902	1470	1300	2090
4	1730	2510	801	1540	1520	1520	[illegible]	643	860	1460	1300	1390
5	1920	2310	963	1530	[illegible]	1460	1760	852	847	1340	1330	1710
6	1920	1460	1290	1540	1630	1490	1510	[illegible]	801	1100	1660	2650
7	1820	1580	1240	1590	1760	1460	1320	643	863	953	1650	1970
8	2040	1630	1460	1670	1760	1470	1410	[illegible]	833	1040	1590	1230
9	2320	1700	1560	1750	1740	1450	1420	934	791	1270	1420	1230
10	2020	1520	1250	1800	1730	1250	1490	1010	793	1410	1290	1340
11	2010	1360	1320	1710	1560	1160	1460	818	816	1370	1080	1210
12	2040	1370	1340	1590	1510	1250	1370	712	820	1290	917	984
13	2790	1380	1270	1660	1560	1290	1540	741	965	1130	1470	992
14	2570	1270	1370	1620	1550	1240	1520	723	1200	1090	1300	1530
15	2730	1320	[illegible]	1680	[illegible]	[illegible]	1610	654	1150	1090	1170	1640
16	2350	1150	1550	1520	[illegible]	1150	2110	1680	1240	1160	1700	1290
17	2120	1130	1610	1560	1470	1120	2130	1720	1270	1250	1270	1350
18	2190	1150	1720	1470	1410	1240	[illegible]	1610	1340	1220	1360	1180
19	2270	1150	1720	1570	1450	1490	1610	1430	1440	1240	1570	1540
20	2220	1220	1710	1590	1410	1620	1570	1550	1400	1190	1560	1610
21	2060	1150	1670	1590	1370	1570	1480	1470	1380	1180	1570	1450
22	2350	987	1630	1610	1280	1510	1560	1560	1200	1200	1510	1550
23	2220	907	1590	1540	1150	1510	1510	1630	1260	1290	1560	1430
24	2200	1140	1620	1720	1220	1220	1530	1570	1320	1590	2060	1920
25	2310	1060	1720	1700	1450	1140	1520	1650	1380	1560	2300	1410
26	2310	1050	1650	1720	1460	1110	1710	1650	1430	1520	1910	1510
27	2160	1040	1620	1610	1400	1350	1450	1640	1340	1450	943	1470
28	2070	978	1580	1360	1480	1250	1460	1660	1390	1050	1000	1530
29	2240	1140	1450	1410	1460	1140	1330	1650	1310	1010	2610	1310
30	2320	1410	1390	1460	---	1120	1270	2000	1290	1130	1900	1300
31	2490	---	1450	1550	---	990	---	1990	---	1450	1480	---
TOTAL	67830	44742	44042	49380	43630	41050	46690	38875	33871	39603	46360	45026
MEAN	2188	1491	1421	1593	1504	1324	1556	1254	1129	1278	1495	1501
MAX	2790	2760	1720	1800	1780	1620	2130	2000	1440	1590	2610	2650
MIN	1730	907	801	1360	1150	990	1020	643	791	953	917	984
AC-FT	134500	88750	87360	97950	86540	81420	92610	77110	67180	78550	91960	89310

CAL YR 1987 TOTAL 1030611 MEAN 2824 MAX 12500 MIN 801 AC-FT 2044000
WTR YR 1988 TOTAL 541099 MEAN 1478 MAX 2790 MIN 643 AC-FT 1073000

09521100 COLORADO RIVER BELOW YUMA MAIN CANAL WASTEWAY, AT YUMA, AZ--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1986 to September 1988 (discontinued).

REMARKS.--Water samples collected by U.S. Bureau of Reclamation. Unpublished weekly specific conductance, March 1972 to July 1977, available from district office in Tucson.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT 1987										
01...	1040	2050	1450	8.10	35.0	25.0		766	[illegible]	98
14...	1030	2490	1350	7.93	26.0	22.5	12	765	8.7	101
NOV										
04...	1130	2480	1420	8.00	26.0	25.0	--	765	8.8	97
16...	1015	1230	1660	8.00	19.0	16.5	5.2	769	8.9	90
DEC										
02...	1130	796	1600	8.00	25.0	15.5	--	770	9.4	94
17...	0950	1520	1240	7.93	12.5	10.5	4.5	760	10.9	98
JAN 1988										
07...	1230	1500	[illegible]	[illegible]	14.5	11.5	--	770	10.9	97
21...	1300	1610	1260	7.95	17.0	13.0	6.6	774	11.3	99
FEB										
04...	1045	1550	1340	[illegible]	15.0	11.5	--	771	11.9	99
17...	1145	1430	[illegible]	8.15	25.0	13.0	3.9	770	10.7	101
MAR										
02...	1105	1420	1340	[illegible]	18.0	16.5	--	765	9.6	98
17...	1320	1090	1430	7.86	22.5	17.0	7.3	775	[illegible]	102
APR										
07...	1100	1290	1340	7.90	[illegible]	14.5		766	8.7	95
20...	0850	1540	1230	[illegible]	[illegible]	13.5	4.1	763	8.8	95
MAY										
05...	1045	648	1610	8.25	22.0	20.5		765	[illegible]	92
19...	1015	1500	1190	8.15	27.0	[illegible]	6.4	764	--	--
JUN										
01...	0945	[illegible]	[illegible]	8.10	[illegible]	[illegible]		765	8.0	93
15...	0850	[illegible]	1320	8.15	32.0	[illegible]	[illegible]	765	7.8	95
JUL										
07...	0845	914	1440	8.10	[illegible]	[illegible]	--	764	7.3	93
21...	0830	1150	1350	[illegible]	[illegible]	[illegible]	5.1	768	7.7	98
AUG										
03...	[illegible]	1320	1290	[illegible]	[illegible]	[illegible]	--	765	7.4	95
17...	0845	1250	1240	[illegible]	[illegible]	26.5	[illegible]	760	7.6	96
SEP										
06...	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27.5	--	763	7.3	92
21...	0840	1570	[illegible]	8.10	24.0	[illegible]	8.4	765	7.8	91

09521100 COLORADO RIVER BELOW YUMA MAIN CANAL WASTEWAY, AT YUMA, AZ--Continued

WATER QUALITY DATA

DATE	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
OCT 1987									
01...	--	--	--	--	--	--	--	--	--
14...	12	330	330	81	32	150	4	4.4	195
NOV									
04...	--	--	--	--	--	--	--	--	--
18...	19	400	400	100	37	200	4	4.8	229
DEC									
02...	--	--	--	--	--	--	--	--	--
17...	10	350	350	88	32	140	3	4.5	190
JAN 1988									
07...	--	--	--	--	--	--	--	--	--
21...	27	370	370	94	33	130	3	4.5	192
FEB									
04...	--	--	--	--	--	--	--	--	--
17...	25	340	340	85	30	130	3	2.2	195
MAR									
02...	--	--	--	--	--	--	--	--	--
17...	88	370	370	93	34	160	4	4.7	203
APR									
07...	--	--	--	--	--	--	--	--	--
20...	22	330	340	83	31	130	3	4.1	198
MAY									
05...	--	--	--	--	--	--	--	--	--
19...	21	330	330	82	30	120	3	3.0	198
JUN									
01...	--	--	--	--	--	--	--	--	--
15...	83	360	360	88	33	140	3	4.0	204
JUL									
07...	--	--	--	--	--	--	--	--	--
21...	18	350	350	84	33	150	4	4.3	205
AUG									
03...	--	--	--	--	--	--	--	--	--
17...	12	330	330	78	32	120	3	4.0	198
SEP									
06...	--	--	--	--	--	--	--	--	--
21...	<10	360	360	87	34	140	3	4.3	200

DATE	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 1987									
01...	--	--	--	--	--	935	-	--	75
14...	0	160	290	150	0.50	865	708	1.18	22
NOV									
04...	--	--	--	--	--	914	--	-	52
18...	0	188	390	200	0.60	1110	933	1.51	18
DEC									
02...	--	--	--	--	--	1040	--	--	2
17...	0	156	270	130	0.40	802	665	1.09	16
JAN 1988									
07...	--	--	--	--	--	795	--	--	8
21...	0	157	300	130	0.50	810	692	1.10	15
FEB									
04...	--	--	--	--	--	856	--	--	16
17...	0	160	290	140	0.40	830	678	1.13	11
MAR									
02...	--	--	--	--	-	862	--	--	17
17...	0	166	330	170	0.50	929	792	1.26	20
APR									
07...	--	--	--	--	--	862	--	--	17
20...	0	162	300	130	0.40	808	679	1.10	23
MAY									
05...	--	--	--	--	--	1050	--	--	13
19...	0	162	290	120	0.40	772	646	1.05	12
JUN									
01...	--		--	--	--	862	--	--	12
15...	0	167	310	140	0.50	782	716	1.06	12
JUL									
07...	--	--	--	--	--	930	--	--	15
21...	0	168	310	150	0.40	867	732	1.18	15
AUG									
03...	--	--	--	--	--	755	--	--	23
17...	0	162	290	130	0.40	812	655	1.10	25
SEP									
06...	--	-	--	--	--	816	--	--	23
21...	0	164	310	130	0.40	844	706	1.15	32

< Actual value is known to be less than value shown.

09521100 COLORADO RIVER BELOW YUMA MAIN CANAL WASTEWAY, AT YUMA, AZ--Continued

WATER QUALITY DATA

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	BORON, DIS-SOLVED (UG/L AS B) (01020)
OCT 1987									
01...	0.400	0.040	0.36	0.40	0.80	3.5	0.020	0.02	--
14...	0.400	0.030	0.37	0.40	0.80	3.5	0.040	0.04	230
NOV									
04...	0.400	0.070	0.43	0.50	0.90	4.0	0.030	0.03	--
18...	0.500	0.050	0.25	0.30	0.80	3.5	0.010	0.01	310
DEC									
02...	0.200	0.060	0.34	0.40	0.60	2.7	0.010	0.01	--
17...	0.300	0.050	0.25	0.30	0.60	2.7	0.050	0.05	160
JAN 1988									
07...	0.300	0.040	--	<0.20	--	--	0.030	0.03	--
21...	0.300	0.060	0.44	0.50	0.80	3.5	0.040	0.04	180
FEB									
04...	0.300	0.050	0.45	0.50	0.80	3.5	0.030	0.03	--
17...	0.300	0.040	0.46	0.50	0.80	3.5	0.030	0.03	170
MAR									
02...	0.300	0.041	0.56	0.60	0.90	4.0	0.021	0.02	--
17...	0.300	0.030	0.27	0.30	0.60	2.7	0.010	0.01	220
APR									
07...	0.300	0.030	0.37	0.40	0.70	3.1	0.040	0.04	--
20...	0.300	0.040	0.26	0.30	0.60	2.7	0.040	0.04	170
MAY									
05...	0.400	0.060	0.24	0.30	0.70	3.1	0.020	0.02	--
19...	0.300	0.020	--	<0.20	--	--	0.020	0.02	170
JUN									
01...	0.300	0.020	--	<0.20	--	--	0.020	0.02	--
15...	0.300	0.010	0.49	0.50	0.80	3.5	<0.010	--	180
JUL									
07...	0.400	0.050	--	<0.20	--	--	0.030	0.03	--
21...	0.300	<0.010	--	0.60	0.90	4.0	0.020	0.02	200
AUG									
03...	0.300	0.050	0.45	0.50	0.80	3.5	0.040	0.04	--
17...	0.300	<0.010	--	0.30	0.60	2.7	0.020	0.02	190
SEP									
06...	0.200	<0.010	--	0.30	0.50	2.2	0.040	0.04	--
21...	0.200	0.020	0.48	0.50	0.70	3.1	0.040	0.04	190

< Actual value is known to be less than value shown

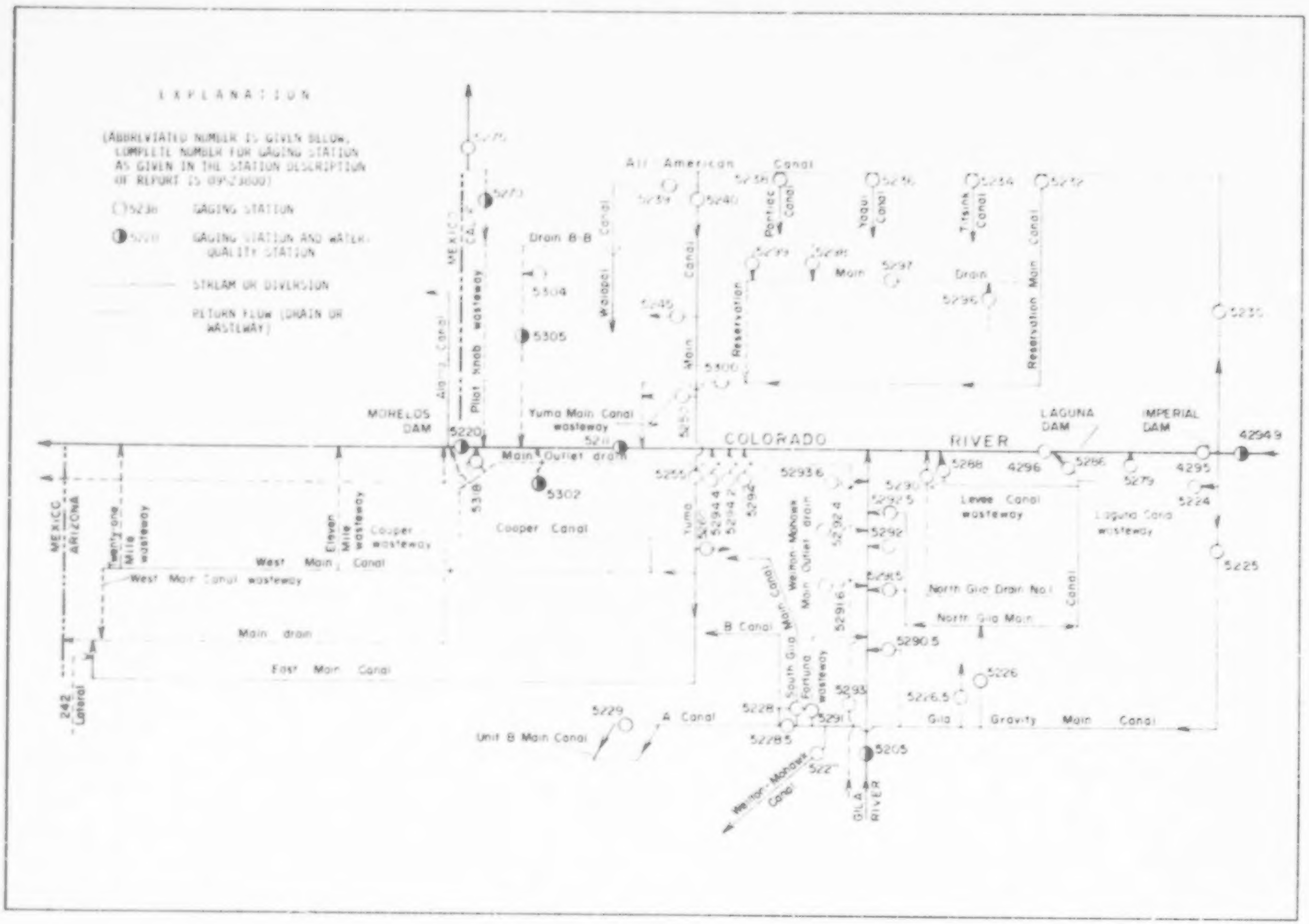
EXPLANATION
(ABBREVIATED NUMBER IS GIVEN BELOW, COMPLETE NUMBER FOR GAGING STATION AS GIVEN IN THE STATION DESCRIPTION OF REPORT IS 09523000)
5236 GAGING STATION
5220 GAGING STATION AND WATER-QUALITY STATION
STREAM OR DIVERSION
RETURN FLOW (DRAIN OR WASTEWAY)
All American Canal
5239
5240
5238
5236
5234
5232
5270
5275
MEXICO
CAL
Pontiac Canal
Yaqui Canal
Titsink Canal
Drain B-B
Walapai Canal
Canal
5299
5298
Main
5297
Drain
5296
Reservation Main Canal
5304
5245
5305
Reservation
Main
5300
5233
Alamo Canal
Pilot Knob wasteway
MORELOS DAM
5220
Yuma Main Canal wasteway
5211
5250
COLORADO RIVER
LAGUNA DAM
IMPERIAL DAM
42949
4296
4295
5288
5286
5279
5224
Main Outlet drain
5318
5302
5255
5293.6
5290
5292.5
5292
5291.5
5290.5
Levee Canal wasteway
Laguna Canal wasteway
5225
MEXICO
ARIZONA
Twenty-one Mile wasteway
Eleven Mile wasteway
Cooper wasteway
Cooper Canal
Yuma
5294.4
5294.2
5294
Wellton-Mohawk Main Outlet drain
5292.4
5291.6
West Main Canal
West Main Canal wasteway
Main drain
East Main Canal
B Canal
Gila Main Canal
North Gila Drain No.1
North Gila Main Canal
South Gila
Fortuna wasteway
5293
5226
5226.5
242 Lateral
5229
A Canal
Unit B Main Canal
5228
5228.5
5291
5227
5205
Gila Gravity Main Canal
Wellton-Mohawk Canal
GILA RIVER

Figure 6.--Schematic diagram showing gaging stations and water-quality stations on streams, diversions, and return flows between Imperial Dam and the southerly international boundary.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY ABOVE MORELOS DAM, NEAR ANDRADE, CA

(National stream-quality accounting network)

LOCATION.--Lat 32°43'07", long 114°43'05", in NE¼SE¼ sec.21, T.8 S., R.24 W., Gila and Salt River meridian, in Arizona, Yuma County, Hydrologic Unit 15030108, on left bank at northerly international boundary, 0.5 mi east of Andrade, 1.1 mi upstream from Morelos Dam, 1.1 mi downstream from Rockwood Gate, and 6.4 mi downstream from gaging station on Colorado River below Yuma Main Canal wasteway.

DRAINAGE AREA.--246,700 mi^2, approximately, including all closed basins entirely within the drainage boundary, also 3,959 mi^2 in Great Divide basin in southern Wyoming.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1950 to current year. Prior to October 1958 published as "at international boundary."

GAGE.--Water-stage recorder. Datum of gage is mean sea level, National Geodetic Vertical Datum of 1929. Supplementary water-stage recorder 1,680 ft upstream at same datum.

REMARKS.--No estimated daily discharges. This record shows water passing northerly international boundary. Minor diversions to the United States below this station by pumping from ground water for irrigation in the floodway between river and Yuma levee.

COOPERATION.--Records furnished by International Boundary and Water Commission, U.S. Section (discharge figures rounded in accordance with Geological Survey standard practice).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,600 ft^3/s Aug. 20, 1983; maximum elevation, 115.65 ft, Aug. 18, 19, 1983; minimum discharge, 495 ft^3/s Sept. 28, 1970; minimum elevation, 101.72 ft, Nov. 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 10,300 ft^3/s Jan. 10; minimum daily, 1,310 ft^3/s Sept. 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3690	6230	2100	6700	4470	3130	3860	2700	3390	2930	3960	2280
2	3690	6440	2210	6900	3440	3410	3970	2430	2210	2950	4020	2090
3	3590	4680	3630	7760	5040	3360	3840	2040	1980	2950	3950	2160
4	3490	4170	2250	8730	4940	3260	3910	1860	1890	3070	3940	1680
5	3950	4190	3150	7510	6240	3020	4540	1710	1870	3040	3950	1760
6	3730	3420	3900	7220	6990	2980	4050	1880	2030	3060	4030	2550
7	3600	2780	4700	7700	7160	2930	3710	1860	2020	3070	3930	2240
8	3530	3300	3940	8920	5780	2980	3850	1840	2000	3170	3700	1600
9	3640	3800	4380	9100	5050	3470	3820	2080	2020	3100	3700	1500
10	3380	3150	3840	10300	4620	3770	3820	2270	2030	3170	3710	1560
11	3860	3360	4690	9740	4720	3000	3890	1940	2330	3390	3700	1490
12	4020	2840	4900	6370	5000	3200	3900	1930	2320	3460	3750	1370
13	5010	2520	4680	6950	4650	3030	3760	2010	2520	3480	3920	1310
14	3720	2280	4030	7040	4470	3250	3750	1830	2570	3460	3840	1680
15	3690	2360	4120	7140	3590	3770	3950	1910	2550	3450	3610	1900
16	4210	2320	5040	7170	3320	3650	4550	1780	2550	3470	3890	1520
17	5160	2300	6770	7350	2930	3660	6140	1910	2520	3450	3860	1540
18	4140	2310	7950	6990	2590	3610	4080	1800	2550	3480	3880	1390
19	3860	2380	7650	6120	2600	3840	3820	1680	2510	3460	4020	1680
20	4120	2480	7880	5530	2550	3720	3400	1660	2860	3450	4960	1770
21	3790	2220	7910	5750	2480	3660	3220	1570	3010	3570	5660	1610
22	3730	2160	8450	6590	2430	4380	3140	1630	3000	3580	4920	1710
23	3790	2070	7910	5460	2260	4250	3070	1820	3040	3580	5100	1560
24	3540	2340	7920	5580	2700	4330	3090	1760	3050	3730	4970	2090
25	4040	2200	7560	4840	3150	4240	3100	1770	3030	3730	6610	1650
26	3900	2200	7870	4280	2690	4210	3070	1810	3020	3850	5950	1670
27	3760	2180	8070	3670	2930	4200	3060	1740	3040	3790	3610	1550
28	4060	2120	6680	3790	3360	4240	3050	1770	3040	3730	3960	1640
29	4440	2180	5940	3280	4170	4300	3090	1780	3020	3760	5550	1530
30	6080	2200	6000	4330	---	4170	2930	1980	3080	3810	4040	1430
31	6190	---	6510	4610	---	4230	---	3510	---	3830	3440	---
TOTAL	125400	89180	172630	203440	116320	113250	111450	60260	77050	106020	132130	51510
MEAN	4045	2973	5569	6563	4011	3653	3715	1944	2568	3420	4262	1717
MAX	6190	6440	8450	10300	7160	4380	6140	3510	3390	3850	6610	2550
MIN	3380	2070	2100	3280	2260	2930	2930	1570	1870	2930	3440	1310
AC-FT	248700	176900	342400	403500	230700	224600	221100	119500	152800	210300	262100	102200

CAL YR 1987 TOTAL 2283910 MEAN 6257 MAX 18800 MIN 2070 AC-FT 4530000
WTR YR 1988 TOTAL 1358640 MEAN 3712 MAX 10300 MIN 1310 AC-FT 2695000

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1968 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1969 to September 1984.

REMARKS.--Unpublished chemical analyses for water years 1961-68 available from district office in Tucson, Ariz.

WATER QUALITY DATA

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L) (00340)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
OCT 1987												
01...	1245	3860	1250	8.00	37.0	25.0	--	766	7.9	96	--	--
14...	1230	3820	1200	7.80	32.0	23.0	15	765	8.2	96	21	K140
NOV												
04...	1330	4020	1300	8.00	28.0	21.0	--	765	8.5	95	--	--
18...	1145	2380	1430	8.10	24.0	16.0	4.3	775	9.0	90	37	64
DEC												
02...	1345	2000	1350	7.95	21.0	16.0	--	770	9.2	97	--	--
16...	1110	4750	1090	8.00	12.0	10.0	2.6	765	10.7	95	10	14
JAN 1988												
07...	1345	7380	990	7.90	11.0	10.5	--	770	11.0	98	--	--
21...	1020	5520	1070	8.05	10.0	9.0	3.2	774	11.7	100	20	28
FEB												
04...	1145	4700	1200	8.00	18.5	12.5	--	771	10.4	97	--	--
17...	1015	3190	1170	8.05	14.0	13.0	4.5	770	10.0	94	35	25
MAR												
02...	1240	3650	1140	8.10	20.0	16.5	--	765	9.3	95	--	--
16...	1330	3620	1090	7.95	25.0	16.0	5.8	769	9.8	99	120	K22
APR												
07...	0930	3510	1080	8.00	28.0	19.5	--	766	8.6	93	--	--
20...	1010	3640	1110	8.10	27.0	19.5	6.1	753	8.6	94	<10	32
MAY												
05...	0910	1720	1140	8.00	22.0	20.0	--	765	8.3	91	--	--
18...	1015	1920	1370	8.10	29.5	23.0	5.7	762	8.7	102	<10	77
JUN												
01...	1135	3250	1110	8.00	37.0	23.5	--	765	7.7	91	--	--
15...	1030	2620	1150	8.07	35.5	26.0	6.1	765	7.7	95	42	43
JUL												
07...	1030	3050	1130	7.90	33.0	28.5	--	764	7.3	94	--	--
20...	1220	3500	1350	8.10	36.0	29.0	4.9	767	7.9	103	15	66
AUG												
03...	1100	4000	1040	8.05	37.5	30.0	--	765	7.6	101	--	--
17...	1040	3840	1070	8.10	33.5	27.0	2.8	766	7.6	95	12	K46
SEP												
06...	1230	2700	1210	8.20	33.0	29.0	--	763	8.4	110	--	--
21...	1015	1660	1260	8.10	27.0	24.0	8.5	765	8.2	97	11	120

K Based on non-ideal colony count.
< Actual value is known to be less than value shown.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

WATER QUALITY DATA

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT 1987											
01...	--	--	--	--	--	--	--	--	--	--	--
14...	66	320	190	80	29	130	3	4.1	183	0	150
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
18...	67	360	190	91	33	160	4	4.4	210	0	172
DEC											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	70	330	180	82	34	110	3	4.2	183	0	150
JAN 1988											
07...	--	--	--	--	--	--	--	--	--	--	--
21...	56	340	190	86	30	110	3	4.1	190	0	156
FEB											
04...	--	--	--	--	--	--	--	--	--	--	--
17...	38	330	170	82	29	120	3	5.0	184	0	151
MAR											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	19	320	170	79	29	110	3	4.2	179	0	147
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	29	320	170	80	30	110	3	3.8	185	0	152
MAY											
05...	--	--	--	--	--	--	--	--	--	--	--
18...	99	350	[illegible]	[illegible]	32	[illegible]	4	4.3	203	0	166
JUN											
01...	--	--	--	--	--	--	--	--	--	--	--
15...	30	320	170	79	[illegible]	[illegible]	3	4.3	189	0	155
JUL											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	23	320	170	78	29	120	3	4.0	184	0	151
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	20	310	170	76	[illegible]	[illegible]	3	3.8	178	0	146
SEP											
06...	--	--	--	--	--	--	--	--	--	--	--
21...	50	370	200	89	35	[illegible]	4	4.4	210	0	172

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT 1987											
01...	--	--	--		[illegible]		--	22	--	0.300	--
14...	270	120	0.40	--	[illegible]	[illegible]	1.04	24	--	0.400	--
NOV											
04...	--	--	--	--	[illegible]	--	--	7	--	0.300	--
18...	340	150	[illegible]	13	[illegible]	697	1.26	10	<0.010	0.300	0.310
DEC											
02...	--	--	--	--	[illegible]	--	--	2	--	0.200	--
16...	250	100	0.40	11	[illegible]	675	0.96	3	<0.010	0.200	0.220
JAN 1988											
07...	--	--	--	--	[illegible]	--	--	29	--	0.200	--
21...	270	96	0.40	--	[illegible]	685	0.94	8	--	0.300	--
FEB											
04...	--	--	--	--	764	--	--	12	--	0.300	--
17...	270	110	0.40	11	749	724	1.02	11	<0.010	0.300	0.300
MAR											
02...	--	--	--	--	862	--	--	23	--	0.300	--
16...	270	97	0.40	--	699	670	0.95	50	--	0.300	--
APR											
07...	--	--	--	--	677	--	--	14	--	0.300	--
20...	270	100	0.40	11	714	699	0.97	28	<0.010	0.200	0.310
MAY											
05...	--	--	--	--	815	--	--	9	--	0.300	--
18...	310	150	0.50	--	851	832	1.16	18	--	0.400	--
JUN											
01...	--	--	--	--	718	--	--	22	--	0.300	--
15...	270	110	0.50	11	733	719	1.0	10	<0.010	0.300	0.310
JUL											
07...	--	--	--	--	720	--	--	24	--	0.300	--
20...	280	110	0.40	--	747	713	1.02	20	--	0.200	--
AUG											
03...	--	--	--	--	683	--	--	29	--	0.200	--
17...	270	95	0.30	11	687	665	0.93	22	<0.010	0.200	0.210
SEP											
06...	--	--	--	--	766	--	--	44	--	0.200	--
21...	330	150	0.40	--	900	861	1.22	21	--	0.300	--

< Actual value is known to be less than value shown.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

WATER QUALITY DATA

DATE	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS DISSOLVED (MG/L AS P) (00666)	PHOSPHOROUS ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)
OCT 1987											
01...	0.050	--	0.35	0.40	0.70	3.1	0.020	--	--	0.02	--
14...	0.060	--	0.34	0.40	0.80	3.5	0.080	--	--	0.08	--
NOV											
04...	0.080	--	0.42	0.50	0.80	3.5	<0.010	--	--	--	--
18...	0.070	0.050	0.23	0.30	0.60	2.7	0.030	0.010	0.010	0.03	<10
DEC											
02...	0.040	--	0.26	0.30	0.50	2.2	<0.010	--	--	--	--
16...	0.060	0.050	0.14	0.20	0.40	1.8	0.040	0.020	<0.010	0.04	--
JAN 1988											
07...	0.050	--	0.15	0.20	0.40	1.8	0.040	--	--	0.04	--
21...	0.060	--	0.34	0.40	0.70	3.1	0.030	--	--	0.03	--
FEB											
04...	0.050	--	0.15	0.20	0.50	2.2	0.020	--	--	0.02	--
17...	0.060	0.060	0.24	0.30	0.60	2.7	0.040	0.010	<0.010	0.04	<10
MAR											
02...	0.050	--	0.55	0.60	0.90	4.0	0.020	--	--	0.02	--
16...	0.010	--	0.29	0.30	0.60	2.7	<0.010	--	--	--	--
APR											
07...	0.060	--	0.34	0.40	0.70	3.1	0.030	--	--	0.03	--
20...	0.050	0.050	0.15	0.20	0.40	1.8	0.040	<0.010	0.010	0.04	40
MAY											
05...	0.130	--	0.27	0.40	0.70	3.1	0.030	--	--	0.03	--
18...	0.060	--	0.64	0.70	1.1	4.9	0.040	--	--	0.04	--
JUN											
01...	0.040	--	0.26	0.30	0.60	2.7	0.020	--	--	0.02	--
15...	0.040	0.060	0.36	0.40	0.70	3.1	0.010	<0.010	0.020	0.01	--
JUL											
07...	0.070	--	0.73	0.80	1.1	4.9	0.020	--	--	0.02	--
20...	0.020	--	--	<0.20	--	--	0.020	--	--	0.02	--
AUG											
03...	0.050	--	0.45	0.50	0.70	3.1	0.050	--	--	0.05	--
17...	0.020	0.040	0.38	0.40	0.60	2.7	0.260	<0.010	<0.010	0.26	<10
SEP											
06...	0.040	--	0.36	0.40	0.60	2.7	0.060	--	--	0.06	--
21...	0.080	--	0.42	0.50	0.80	3.5	0.060	--	--	0.06	--

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
OCT 1987											
01...	--	--	--	--	--	--	--	--	--	--	--
14...	3	3	90	--	170	<1	<1	<1	<1	--	8
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
18...	3	2	91	<0.5	240	<1	<1	1	<1	<3	9
DEC											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	2	2	91	--	130	<1	2	1	<1	--	8
JAN 1988											
07...	--	--	--	--	--	--	--	--	--	--	--
21...	2	2	--	--	130	1	<1	2	<1	--	5
FEB											
04...	--	--	--	--	--	--	--	--	--	--	--
17...	3	2	88	<0.5	160	<1	2	1	<1	<3	5
MAR											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	2	1	91	--	140	<1	<1	2	<1	--	8
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	<1	2	95	<0.5	140	2	<1	4	<1	<3	7
MAY											
05...	--	--	--	--	--	--	--	--	--	--	--
18...	3	3	89	--	210	1	<1	2	<1	--	3
JUN											
01...	--	--	--	--	--	--	--	--	--	--	--
15...	3	2	85	--	170	1	<1	1	<1	--	4
JUL											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	3	3	92	--	160	1	<1	<1	<1	--	5
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	3	3	94	<0.5	140	1	<1	<1	<1	<3	12
SEP											
06...	--	--	--	--	--	--	--	--	--	--	--
21...	3	2	96	--	200	<1	2	1	<1	--	6

< Actual value is known to be less than value shown.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

WATER QUALITY DATA

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)
OCT 1987											
01...	--	--	--	--	--	--	--	--	--	--	--
14...	2	1300	6	<5	<5	--	150	9	<0.10	--	--
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
18...	<1	310	<3	<5	<5	67	80	21	<0.10	<0.1	<10
DEC											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	1	840	4	62	<5	--	80	20	--	--	--
JAN 1988											
07...	--	--	--	--	--	--	--	--	--	--	--
21...	1	340	<10	<5	<5	--	60	20	<0.10	--	--
FEB											
04...	--	--	--	--	--	--	--	--	--	--	--
17...	1	470	14	<5	<5	54	70	17	<0.10	<0.1	<10
MAR											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	1	410	5	<5	<5	--	70	14	<0.10	--	--
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	1	660	3	7	<5	50	70	7	<0.10	<0.1	<10
MAY											
05...	--	--	--	--	--	--	--	--	--	<0.1	--
18...	10	380	5	12	<5	--	100	20	<0.10	--	--
JUN											
01...	--	-	--	--	--	--	--	--	--	--	--
15...	3	350	<3	<5	<5	--	80	9	<0.10	--	--
JUL											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	1	250	3	<5	<5	--	80	6	<0.10	--	--
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	1	330	3	<5	<5	50	70	7	<0.10	<0.1	<10
SEP											
06...	--	--	--	--	--	--	--	--	--	--	--
21...	3	750	11	<5	<5	--	120	16	<0.10	--	--

DATE	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)
OCT 1987											
01...	--	--	--	--	--	--	--	--	--	--	--
14...	--	2	3	<1.0	--	--	10	5	--	--	--
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
18...	<2	2	2	<1.0	1200	<6	20	<3	--	--	--
DEC											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	--	2	2	<1.0	--	--	<10	5	7.0	<0.4	7.8
JAN 1988											
07...	--	--	--	--	--	--	--	--	--	--	--
21...	--	2	2	<1.0	--	--	<10	<10	--	--	--
FEB											
04...	--	--	--	--	--	--	--	--	--	--	--
17...	2	2	2	<1.0	1000	<6	<10	4	--	--	--
MAR											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	--	2	2	<1.0	--	--	<10	3	--	--	--
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	3	2	2	2.0	1100	<6	10	19	--	--	--
MAY											
05...	--	--	--	--	--	--	--	--	--	--	--
18...	--	3	3	1.0	--	--	20	<3	--	--	--
JUN											
01...	--	--	--	--	--	--	--	--	--	--	--
15...	--	3	3	<1.0	--	--	<10	<3	4.3	<0.4	7.3
JUL											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	--	3	2	<1.0	--	--	<10	7	--	--	--
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	<1	2	2	<1.0	1000	<6	20	21	--	--	--
SEP											
06...	--	--	--	--	--	--	--	--	--	--	--
21...	--	2	2	<1.0	--	--	<10	10	--	--	--

< Actual value is known to be less than value shown.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA--Continued

WATER QUALITY DATA

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CYANIDE TOTAL (MG/L AS CN) (00720)	CYANIDE DIS-SOLVED (MG/L AS CN) (00723)	SED SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 1987											
01...	--	--	--	--	--	--	--	--	--	--	--
14...	--	--	--	--	--	--	--	--	--	77	790
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	41	266
DEC											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	1.5	5.3	1.5	0.09	3.0	--	--	--	18	67	859
JAN 1988											
07...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	26	390
FEB											
04...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	98	14	121
MAR											
02...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	21	209
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	93	18	177
MAY											
05...	--	--	--	--	--	0.7	<0.010	<0.01	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--
JUN											
01...	--	--	--	--	--	--	--	--	--	--	--
15...	1.1	5.0	1.1	0.11	3.5	--	--	--	--	--	--
JUL											
07...	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	--	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	--	--	--	--	--	83	14	145
SEP											
06...	--	--	--	--	--	--	--	--	--	--	--
21...	--	--	--	--	--	--	--	--	--	16	72

< Actual value is known to be less than value shown.

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

Two major diversions for irrigation water are located at Imperial Dam, the Gila Gravity Main Canal, and the All American Canal. The Gila Gravity Main Canal diverts water for irrigation in the Gila Project which is located entirely in Arizona. The All American Canal diverts water for irrigation in Imperial Valley in California and the Yuma Project in Arizona and California. Between Imperial Dam and the northerly international boundary with Mexico, water is diverted from these principal canals for the individual diversions of the Gila and Yuma Projects.

Between Imperial Dam and the northerly international boundary with Mexico, flows from irrigated areas enter the Colorado River through many drains and wasteways in Arizona and California. Other return flows enter the Gila River below the gaging station near Dome (09520500).

See figure [illegible] p. [illegible] for a schematic diagram showing location of diversions and return flows.

Diversions at and below Imperial Dam, AZ-CA

[illegible] GILA GRAVITY MAIN CANAL AT IMPERIAL DAM.--See p. [illegible]

[illegible] NORTH GILA MAIN CANAL
LOCATION.--Water-stage recorder and sharp-crested weir, in [illegible] sec. [illegible], T. 7 S., R. 22 W., Yuma County, Hydrologic Unit [illegible], at [illegible] ft downstream from turnout from Gila Gravity Main Canal and [illegible] mi south of [illegible].

PERIOD OF RECORD.--October [illegible] to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation in North Gila Valley.

[illegible] SOUTH GILA MAIN CANAL No. 1
LOCATION.--Water-stage recorder in [illegible] sec. [illegible], T. [illegible], R. [illegible] W., Yuma County, Hydrologic Unit [illegible], at turnout from Gila Gravity Main Canal and [illegible] downstream from [illegible] North Gila Main Canal.

PERIOD OF RECORD.--[illegible] to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation in South Gila Valley.

[illegible] MAIN CANAL
LOCATION.--[illegible] water-stage [illegible] and gate openings [illegible] Yuma County, Hydrologic Unit [illegible], at turnout from [illegible] Main Canal.

PERIOD OF RECORD.--[illegible] to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation in the [illegible] and Mohawk areas of the Lower Gila Valley.

COOPERATION.--[illegible] Mohawk Irrigation District.

[illegible] MAIN CANAL
LOCATION.--[illegible] Yuma County, Hydrologic Unit [illegible], at [illegible] Gila Gravity Main Canal.

PERIOD OF RECORD.--[illegible] to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation in [illegible] Valley.

COOPERATION.--Records furnished by [illegible] Irrigation District.

[illegible] GILA GRAVITY MAIN CANAL AT [illegible] PLANT
LOCATION.--[illegible] in [illegible] sec. [illegible], T. [illegible], R. [illegible] W., Yuma County, Hydrologic Unit [illegible], at end of Gila Gravity Main Canal and head of Yuma Mesa canals.

PERIOD OF RECORD.--October [illegible] to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation on Yuma Mesa and in Yuma Auxiliary Division of Yuma Valley.

COOPERATION.--Records furnished by Yuma Mesa Irrigation and Drainage District.

[illegible] UNIT B MAIN CANAL
LOCATION.--Headworks in [illegible] sec. [illegible], T. 9 S., R. 23 W., Yuma County, Hydrologic Unit [illegible], [illegible] mi northwest of Somerton.

PERIOD OF RECORD.--October 1967 to current year (monthly discharge only).

REMARKS.--Record shows water available for irrigation in Yuma Auxiliary Division of the Yuma Project.

COOPERATION.--Record is furnished by Yuma Mesa Irrigation and Drainage District.

[illegible] ALL AMERICAN CANAL NEAR IMPERIAL DAM.--See p. 270.

Diversions at and below Imperial Dam, AZ-CA--Continued

09523200. RESERVATION MAIN CANAL.

LOCATION.--Water-stage recorder and, since Sept. 5, 1975, gate-opening recorder, in NE¼NE¼ sec.35, T.15 S., R.23 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, at turnout from All-American Canal and 5.8 mi downstream from Imperial Dam.

PERIOD OF RECORD.--August 1950 to current year (monthly discharge only). Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record computed from rated gate on turnout from All-American Canal and shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

COOPERATION.--Record of gate openings furnished by Bard Water District.

09523400. TITSINK CANAL.

LOCATION.--Water-stage recorder and Parshall flume in NE¼SW¼ sec.27, T.15 S., R.23 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 0.6 mi downstream from turnout from All-American Canal and 7.2 mi downstream from Imperial Dam.

PERIOD OF RECORD.--August 1950 to current year (monthly discharge only). Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09523600. YAQUI CANAL.

LOCATION.--Water-stage recorder and Parshall flume in NW¼SE¼ sec.31, T.15 S., R.23 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 700 ft downstream from turnout from All-American Canal and 11.1 mi downstream from Imperial Dam.

PERIOD OF RECORD.--June 1950 to current year (monthly discharge only). Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09523800. PONTIAC CANAL.

LOCATION.--Water-stage recorder and Parshall flume in NW¼SW¼ sec.1, T.16 S., R.22 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 500 ft downstream from turnout from All-American Canal and 13.1 mi downstream from Imperial Dam.

PERIOD OF RECORD.--August 1950 to current year (monthly discharge only). Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09523900. WALAPAI CANAL.

LOCATION.--Water-stage recorder and sharp-crested weir in NE¼SE¼ sec.10, T.16 S., R.22 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 100 ft downstream from siphon-drop powerplant forebay and 4.3 mi north of Yuma.

PERIOD OF RECORD.--October 1946 to current year (monthly discharge only). Prior to October 1965 included in total diversions from All-American Canal and Yuma Main Canal above siphon-drop powerplant and published as part of sta 09524000.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

09524000. YUMA MAIN CANAL AT SIPHON-DROP POWERPLANT.--See p. 271.

09524500. DIVERSIONS FROM YUMA MAIN CANAL BETWEEN SIPHON-DROP POWERPLANT AND YUMA MAIN CANAL WASTEWAY.

LOCATION.--Turnouts for several canals diverting from Yuma Main Canal between siphon-drop powerplant, 4 mi north of Yuma, and Yuma Main Canal wasteway, 1,600 ft upstream from Colorado River siphon, in Imperial County.

PERIOD OF RECORD.--October 1940 to current year (monthly discharge only). Prior to October 1947 in WSP 1313. October 1947 to September 1965 published as supplemental table with records for Yuma Main Canal at siphon-drop powerplant.

REMARKS.--Record shows water available for irrigation in parts of Reservation Division of Yuma Project in California.

COOPERATION.--Record furnished by Bard Water District.

09525500. YUMA MAIN CANAL BELOW COLORADO RIVER SIPHON.--See p. 273.

09526000. DIVERSION FROM YUMA MAIN CANAL FOR MUNICIPAL SUPPLY FOR YUMA.

LOCATION.--Sparling and Venturi flowmeters, in NW¼NE¼ sec.35, T 16 S., R.22 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, on two pipelines, respectively, about 1,000 ft downstream from intake, which is at outlet of Colorado River siphon of Yuma Main Canal, on Arizona side of Colorado River at Yuma.

PERIOD OF RECORD.--June 1945 to current year (monthly discharge only). Prior to October 1973 published as a supplemental table with records for Yuma Main Canal below Colorado River siphon.

REMARKS.--Record shows water for Yuma municipal supply. Figures shown in table herewith are also included in record for Yuma Main Canal below Colorado River siphon (sta 09525500).

COOPERATION.--Records furnished by Yuma County Water Users' Association.

09527500. ALL-AMERICAN CANAL BELOW PILOT KNOB WASTEWAY.--See p. 275.

DIVERSIONS AND RETURN FLOWS AT AND BELOW IMPERIAL DAM

Diversions at and below Imperial Dam, AZ-CA--Continued

MONTHLY DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Month	North Gila Main Canal 09522700	[illegible] Main Canal [illegible]	Wellton-Mohawk Canal [illegible]	South Gila Main Canal [illegible]	Gila Gravity Main Canal at pumping plant [illegible]
October	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
November	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
December	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
CAL YR 1987	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
January	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
February	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
March	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
April	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
May	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
June	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
July	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
August	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
September	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
WTR YR 1988	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Month	[illegible] Main Canal [illegible]	[illegible]	[illegible]	[illegible]	Boundary Canal 09522[illegible]
October	[illegible]	[illegible]	[illegible]	[illegible]	571
November	[illegible]	[illegible]	[illegible]	[illegible]	449
December	[illegible]	[illegible]	[illegible]	[illegible]	451
CAL YR 1987	[illegible]	[illegible]	[illegible]	[illegible]	6,275
January	[illegible]	[illegible]	[illegible]	[illegible]	419
February	[illegible]	[illegible]	[illegible]	[illegible]	654
March	[illegible]	[illegible]	[illegible]	[illegible]	515
April	[illegible]	[illegible]	[illegible]	[illegible]	520
May	[illegible]	[illegible]	[illegible]	[illegible]	544
June	[illegible]	[illegible]	[illegible]	[illegible]	761
July	[illegible]	[illegible]	[illegible]	[illegible]	622
August	[illegible]	[illegible]	[illegible]	[illegible]	553
September	[illegible]	[illegible]	[illegible]	[illegible]	652
WTR YR 1988	[illegible]	[illegible]	[illegible]	[illegible]	7,26[illegible]

Month	[illegible]	[illegible]	[illegible] Main Canal [illegible]
October	[illegible]	[illegible]	[illegible]
November	[illegible]	[illegible]	[illegible]
December	[illegible]	[illegible]	[illegible]
CAL YR 1987	[illegible]	[illegible]	[illegible]
January	[illegible]	[illegible]	[illegible]
February	[illegible]	[illegible]	1,140
March	[illegible]	[illegible]	[illegible]
April	[illegible]	[illegible]	1,290
May	[illegible]	[illegible]	1,680
June	[illegible]	[illegible]	1,840
July	[illegible]	[illegible]	2,010
August	[illegible]	[illegible]	1,800
September	[illegible]	[illegible]	1,760
WTR YR 1988	11,19[illegible]	8,4[illegible]	17,760

NOTE.--Yearly totals given above have been computed from total cfs-days and may differ slightly from the summation of monthly total acre feet on occasion.

09522500 GILA GRAVITY MAIN CANAL AT IMPERIAL DAM, AZ-CA

LOCATION.--Lat 32°52'34", long 114°27'18", in SE¼SW¼ sec.30, T.6 S., R.21 W., Gila and Salt River meridian, Yuma County, Hydrologic Unit 15030107, on right bank 3,200 ft downstream from intake at east end of Imperial Dam.

PERIOD OF RECORD.--August 1943 to current year.

GAGE.--Water-stage recorder. Datum of gage is 160.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good except those below 500 ft^3/s, which are fair. Gila Gravity Main Canal diverts water from Colorado River at left end of Imperial Dam for irrigation of lands in the Gila Project area in Arizona. Diversions to this canal began Aug. 17, 1943. Diversions to North Gila Valley from this canal began Dec. 16, 1954.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,240 ft^3/s May 25, 1965; no flow at canal intake at times in several years when intake gates were closed.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1620	395	1060	183	922	1300	1180	702	1770	1830	2080	1180
2	1560	890	896	213	1040	1190	688	1410	1880	1390	1690	1230
3	1270	861	768	348	1110	1350	644	1530	1520	1020	1710	1010
4	1160	804	546	765	974	822	1470	1600	1140	1190	1660	1030
5	1720	684	496	860	635	517	1710	1650	960	1740	1410	1530
6	1920	470	267	637	403	274	1560	1550	1700	1960	981	1750
7	1920	475	871	449	451	1050	1540	913	1950	1800	830	1940
8	1830	549	953	388	877	1140	1470	765	1680	1930	1710	1750
9	1670	1120	800	490	1200	1020	835	1630	1920	1260	2050	1590
10	1110	1300	655	272	1220	636	620	1780	1700	1090	1950	1340
11	740	1560	916	703	1250	867	1390	1770	1210	1650	2180	1330
12	1520	1590	1030	606	632	630	1760	1650	934	1860	1920	1770
13	1510	1380	1120	748	612	546	1640	1550	1740	2140	1480	1870
14	1440	930	1190	574	564	1130	1570	1330	1630	2000	1120	1740
15	1390	839	1000	330	1230	1360	1230	931	1780	2030	1850	1910
16	1240	979	751	339	1360	1460	607	1860	1860	1510	1770	1600
17	1100	1130	353	232	1620	1450	355	1870	1970	1260	1950	1400
18	764	1200	109	508	1360	1250	1020	2020	1200	1890	1790	1060
19	1530	1060	202	659	1100	835	1220	1990	865	1910	1590	1670
20	1570	895	214	706	602	727	1360	1680	1920	1940	1150	1650
21	1750	899	217	684	427	1360	951	1220	2010	1870	726	1710
22	1630	902	102	275	1120	1500	824	725	1870	1490	1250	1680
23	1140	1310	198	317	1270	1450	655	1680	2070	1210	1010	1400
24	818	1430	530	337	1270	1750	438	1700	1640	949	1320	1020
25	662	1510	565	735	1290	1370	1510	1920	1380	1680	843	836
26	1030	1190	352	702	879	1130	1610	2020	982	1930	819	1540
27	949	945	495	727	520	683	1520	1750	1900	2180	619	1430
28	957	895	702	643	355	1450	1620	1170	1750	2010	516	1650
29	965	822	649	520	1170	1600	1210	1000	1710	1860	982	1330
30	723	1200	544	386	---	1610	635	1570	1600	1160	1230	1230
31	516	---	410	295	---	1600	---	1480	---	1270	1160	---
TOTAL	39724	30235	19162	15731	27700	35512	36040	46421	48700	51069	43366	44176
MEAN	1281	1008	618	507	955	1146	1201	1497	1623	1647	1399	1473
MAX	1920	1590	1190	860	1620	1750	1640	2020	2070	2180	2180	1940
MIN	516	395	102	183	355	274	355	702	865	949	516	836
AC-FT	78790	59970	38010	31200	54940	70440	71490	92080	96600	101300	86020	87620

CAL YR 1987 TOTAL 449448 MEAN 1231 MAX 2160 MIN 102 AC-FT 891500
WTR YR 1988 TOTAL 437836 MEAN 1196 MAX 2180 MIN 102 AC-FT 868400

09523000 ALL-AMERICAN CANAL NEAR IMPERIAL DAM, AZ CA

LOCATION.--Lat 32°52'17", long 114°28'47", in SE¼NW¼ sec.17, T.15 S., R.24 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on left bank 6,800 ft downstream from intake at west end of Imperial Dam and 13.7 mi upstream from turnout to Yuma Main Canal.

PERIOD OF RECORD.--October 1938 to current year. [illegible] monthly discharge only, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is [illegible] ft above National Geodetic Vertical Datum of 1929 (subject to undetermined changes caused by earthquake of May [illegible], 19[illegible]). Since Aug. 21, 1952, auxiliary water-stage recorder 18.5 mi downstream from base gage.

REMARKS.--No estimated daily discharges. Records excellent. All American Canal diverts water from Colorado River at Imperial Dam. Water is used for power development and for irrigation in Yuma, Coachella, and Imperial Valleys. Water can be released back to the river through Pilot Knob powerplant and wasteway for power, regulatory purposes, or for downstream use in Mexico. First diversion to All-American Canal began October 1938, but prior to October 1940 was used only for priming canal.

COOPERATION.--Daily discharge figures furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, [illegible] ft³/s, [illegible], July 15, 16, 19[illegible]; no flow at times.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7620	5940	5200	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9350	7010
2	7620	5740	5770	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9650	6290
3	7170	3960	6570	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9960	6030
4	6690	4270	5610	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10200	5670
5	7460	4270	5710	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10100	5720
6	7980	3550	5820	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9430	6190
7	8290	3260	6940	10200	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9420	6370
8	8330	3770	6540	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9320	6450
9	7870	4140	7220	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9610	6410
10	7660	4160	6710	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9690	6060
11	7320	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10350	5740
12	6700	4360	7360	8340	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10300	5870
13	7230	4220	7150	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8510	6060
14	5520	4230	6920	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9460	6500
15	5760	4190	7260	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9160	6440
16	8230	4490	7440	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9580	9400	6280
17	7130	4790	8400	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9560	5870
18	5770	4950	8540	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8100	9720	8870	5330
19	6020	4960	8550	7640	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9730	6140
20	6640	4760	8700	7820	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10300	6340
21	6490	4530	6750	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	10100	6500
22	6530	4150	9060	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	9450	5860
23	6430	4490	8540	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8760	[illegible]	9520	6480
24	5900	4900	8540	7200	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8510	6270
25	6330	4880	8120	7360	[illegible]	[illegible]	[illegible]	[illegible]	8070	9140	9010	6340
26	6640	4230	6900	6780	[illegible]	[illegible]	[illegible]	7100	7800	9580	6660	6610
27	6870	4850	9260	8370	6360	[illegible]	[illegible]	6310	7650	9700	7360	6560
28	7080	4910	8050	7090	6800	[illegible]	[illegible]	6410	8470	10100	5120	6760
29	7170	4660	7990	6500	7600	[illegible]	[illegible]	6380	8750	10300	8200	6770
30	7620	4790	8160	7240	---	[illegible]	9520	6180	9410	9540	7590	6610
31	6970	---	8190	6610	---	[illegible]	---	7750	---	9220	7870	---
TOTAL	215300	134390	232830	267310	190150	[illegible]	265700	239740	240890	290600	289780	188980
MEAN	6945	4480	7511	8623	6557	8628	8857	7734	8020	9374	9348	6299
MAX	8330	5940	9260	11400	7660	11000	10300	8950	9410	10400	10300	7010
MIN	5520	3260	5200	6370	5850	5340	6190	6180	6650	8340	7360	5670
AC-FT	427000	266600	461800	530200	377200	530500	527000	475500	477800	576400	574800	374800

CAL YR 1987 TOTAL 3113990 MEAN 8531 MAX [illegible] MIN 3260 AC-FT 6177000
WTR YR 1988 TOTAL 2823150 MEAN 7713 MAX 11400 MIN 3260 AC-FT 5600000

09524000 YUMA MAIN CANAL AT SIPHON DROP POWERPLANT, NEAR YUMA, AZ

LOCATION.--Lat 32°46'36", long 114°33'05", in SE¼SE¼ sec. 10, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, 500 ft from turnout from All-American Canal to Yuma Main Canal, 4.0 mi north of Yuma, and 14.9 mi downstream from intake of All-American Canal at Imperial Dam.

PERIOD OF RECORD.--July 1926 to current year. Prior to October 1938, monthly discharge only published in WSP 1313. Diversions from All-American Canal and Yuma Main Canal previously published with this record are listed separately in this report.

GAGE.--Water-stage recorder and rectangular weir through Feb. 28, 1988; sonic flowmeters thereafter. Datum of gage is 136.8 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records are fair above [illegible] ft³/s and poor below. New powerplant began operation Sept. 14, 1987, replacing former powerplant located [illegible] ft downstream that ended operation Dec. 8, 1972. A weir, installed in forebay of former powerplant, is used to measure flow bypassing the new powerplant. Separate gates on the All-American Canal to powerplant and bypass weir are controlled automatically on signal from the powerplant sonic flowmeters on the two generators. Records of daily discharge show quantity of water diverted from All-American Canal to Yuma Main Canal (powerplant and bypass), except that diverted from forebay of former powerplant to Walapai Canal (see sta. [illegible]).

COOPERATION.--Daily discharge record furnished by Yuma County Water Users' Association.

EXTREMES.--1930 to current year: Maximum daily discharge, [illegible] ft³/s Nov. 11, 1947; no flow for several days in 1937-39, 1945.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	863	1220	880	921	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1110
2	903	1220	676	923	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	937	1150
3	911	1220	556	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	941
4	915	1220	637	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	752
5	839	1220	652	911	[illegible]	[illegible]	[illegible]	[illegible]	404	[illegible]	[illegible]	749
6	1030	953	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	1380	725	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	748
8	1760	717	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	938	769
9	1770	711	912	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	851
10	1750	677	912	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	999	847
11	1650	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	1660	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	1390	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	750
14	1610	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1010	[illegible]	[illegible]
15	1660	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	954	924
16	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	974	[illegible]	[illegible]	[illegible]	1000	[illegible]	[illegible]
17	1210	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	938	1120
18	1210	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	936	1140
19	1210	[illegible]	919	919	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	995	939	1140
20	1210	[illegible]	[illegible]	[illegible]	941	974	[illegible]	[illegible]	[illegible]	[illegible]	940	1170
21	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1180
22	1210	462	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1180
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1190
24	1210	[illegible]	915	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1190
25	1210	497	923	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	935	1200
26	1210	455	924	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1200
27	1215	430	920	1020	1010	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1200
28	1210	500	914	1010	1010	953	971	[illegible]	[illegible]	[illegible]	484	[illegible]
29	1210	604	910	1010	1010	941	[illegible]	[illegible]	[illegible]	[illegible]	430	[illegible]
30	1210	725	916	1020	---	1030	[illegible]	1040	[illegible]	[illegible]	659	1090
31	1210	---	917	1020	---	1020	---	[illegible]	---	[illegible]	751	1200
TOTAL	39697	20585	26685	29582	[illegible]	29917	[illegible]	[illegible]	[illegible]	[illegible]	28948	33092
MEAN	1281	686	861	954	[illegible]	965	[illegible]	[illegible]	[illegible]	[illegible]	934	1103
MAX	1770	1220	925	1020	1020	1030	[illegible]	[illegible]	[illegible]	1030	1020	1200
MIN	915	430	[illegible]	910	510	777	[illegible]	132	[illegible]	932	484	654
AC-FT	78740	40830	52930	58680	55130	59340	[illegible]	[illegible]	[illegible]	61810	57420	65640

CAL YR 1987 TOTAL 213566 MEAN 585 MAX 1770 MIN 25 AC-FT 423600
WTR YR 1988 TOTAL 347643 MEAN 950 MAX 1770 MIN 132 AC-FT 689500

09525000 YUMA MAIN CANAL WASTEWAY AT YUMA, AZ

LOCATION.--Lat 32°44'00", long 114°37'20", in SW¼SE¼ sec 26, T.16 S., R 22 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, 45 ft downstream from wasteway gates from Yuma Main Canal which are 1,645 ft upstream from intake of Colorado River siphon on Yuma Main Canal, 0.5 mi north of Yuma, and 3.2 mi downstream from siphon-drop powerplant on Yuma Main Canal.

PERIOD OF RECORD.--April 1913 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder for low flows only prior to Jan. 29, 1988. Datum of gage is 122.51 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 1, 1988, gate-opening record used for low flows only.

REMARKS.--No estimated daily discharges. Records fair. The wasteway discharges into Colorado River 1,000 ft upstream from station on Colorado River below Yuma Main Canal wasteway at Yuma. Discharges are computed as difference between discharge of Yuma Main Canal at siphon drop powerplant and Yuma Main Canal below Colorado River siphon, with deductions for small irrigation diversions from canal between these stations. Records do not include flow of Reservation Main Drain No. 4.

EXTREMES.--1930 to current year: Maximum daily discharge, 2,120 ft³/s Dec. 24, 25, 1948; no flow for several days in 1937-39, 1945, 1950, 1971.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	1160	467	[illegible]	[illegible]	[illegible]	[illegible]	547	62	591	427	630
2	40	1137	276	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	60	531	287	731
3	42	1130	374	716	[illegible]	[illegible]	[illegible]	[illegible]	90	597	316	550
4	34	1040	[illegible]	[illegible]	[illegible]	[illegible]	547	363	106	650	328	411
5	71	909	147	[illegible]	[illegible]	[illegible]	[illegible]	257	76	547	358	398
6	329	618	473	[illegible]	[illegible]	[illegible]	403	121	95	345	495	369
7	616	394	432	565	[illegible]	[illegible]	[illegible]	[illegible]	67	242	724	303
8	955	393	714	631	542	[illegible]	[illegible]	41	57	311	775	307
9	1020	412	677	[illegible]	[illegible]	[illegible]	447	52	73	416	656	415
10	1020	241	442	748	[illegible]	[illegible]	[illegible]	[illegible]	51	562	579	405
11	1010	34	541	[illegible]	[illegible]	[illegible]	[illegible]	40	61	545	242	436
12	1010	46	542	615	[illegible]	[illegible]	[illegible]	[illegible]	73	365	222	299
13	1010	43	577	617	617	[illegible]	[illegible]	14	213	360	337	258
14	1000	47	554	[illegible]	[illegible]	[illegible]	[illegible]	14	417	382	484	497
15	1000	166	542	646	[illegible]	[illegible]	[illegible]	14	342	336	454	427
16	825	142	576	615	[illegible]	[illegible]	[illegible]	[illegible]	463	[illegible]	434	618
17	812	73	642	712	[illegible]	[illegible]	[illegible]	742	435	437	452	498
18	675	67	437	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	575	449	455	513
19	746	43	335	742	[illegible]	[illegible]	[illegible]	537	687	386	564	529
20	661	56	741	723	447	[illegible]	[illegible]	[illegible]	547	374	588	494
21	694	155	621	741	[illegible]	[illegible]	[illegible]	[illegible]	553	383	650	485
22	638	151	771	722	[illegible]	[illegible]	[illegible]	[illegible]	466	413	578	512
23	716	156	[illegible]	714	[illegible]	[illegible]	[illegible]	[illegible]	441	543	508	576
24	723	111	[illegible]	802	417	417	[illegible]	[illegible]	527	820	540	602
25	765	46	842	687	720	[illegible]	[illegible]	[illegible]	601	780	581	637
26	719	61	754	582	[illegible]	[illegible]	495	[illegible]	424	752	461	606
27	622	51	787	749	616	[illegible]	[illegible]	[illegible]	512	660	99	613
28	612	64	711	[illegible]	726	[illegible]	[illegible]	[illegible]	418	255	137	484
29	721	259	576	592	834	[illegible]	269	732	418	220	327	315
30	786	367	568	664	---	372	407	651	543	296	350	437
31	847	---	563	772	---	441	---	224	---	447	314	---
TOTAL	20265	9475	16875	21879	17549	15744	17123	12522	9964	14357	13885	14415
MEAN	654	316	602	706	605	507	571	404	332	463	448	480
MAX	1020	1160	842	802	843	822	891	795	687	820	775	731
MIN	29	34	78	536	95	213	232	14	51	220	99	258
AC-FT	40200	18790	37540	43400	35400	32420	33960	24840	19760	28480	27540	28590

CAL YR 1987 TOTAL 52268.2 MEAN 143 MAX 1160 MIN 7.2 AC-FT 103700
WTR YR 1988 TOTAL 186753 MEAN 510 MAX 1160 MIN 14 AC-FT 370400

09525500 YUMA MAIN CANAL BELOW [illegible] RIVER SIPHON, AT YUMA, AZ

LOCATION.--Two gages, one at each end of canal siphon [illegible] under Colorado River. At intake, lat 32°43'4[illegible], long 114°37'09", in NE¼NE¼ sec.35, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, on left bank 1,[illegible] ft downstream from [illegible] of Yuma Main Canal wasteway gates and 3.5 mi downstream from siphon drop power plant. At outlet, in NW¼NE¼ sec.[illegible], T.16 S., R.22 E., San Bernardino meridian, in Arizona, Yuma County, on [illegible] bank. Siphon [illegible] is 1,[illegible] ft upstream from [illegible] Avenue bridge over Colorado River at Yuma.

PERIOD OF RECORD.--January 1924 to current year. Prior to [illegible] 1938, monthly discharge only published in WSP 1313. Diversion from Yuma Main Canal for [illegible] (Yuma [illegible]), published with this record prior to October 1973, is listed separately in [illegible].

REVISED RECORDS.--WSP 171[illegible]: 1958, [illegible] (Yuma [illegible]).

GAGE.--Water-stage recorder at each end of siphon. [illegible] gage is [illegible] ft above National Geodetic Vertical Datum of 1929. [illegible] above NGVD. Prior to [illegible], [illegible] gages at approximately same sites, read simultaneously.

REMARKS.--No estimated daily discharges. [illegible] below [illegible] ft³/s, which are poor. Daily discharge computed from relation between [illegible] and outlet gages. Records show quantity of water [illegible] which is the difference between intake Valley Division of the Yuma Project [illegible] of Yuma [illegible].

EXTREMES.--193[illegible] to current year: [illegible] ft³/s [illegible], no flow at times.

DISCHARGE, [illegible] FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	821	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
2	860	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
3	863	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	425	[illegible]	413
4	781	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
5	758	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
7	762	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
8	776	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
9	743	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
10	732	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
11	658	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
12	617	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
13	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
16	585	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
17	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
18	527	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
20	544	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
21	537	446	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
22	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
23	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
24	477	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
25	438	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
26	484	304	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
27	570	164	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
28	584	426	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
29	457	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
30	424	344	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
31	383	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
TOTAL	19220	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MEAN	620	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MAX	863	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
MIN	383	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
AC-FT	38120	21420	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CAL YR 1987 TOTAL 154432 MEAN 423 MAX [illegible] MIN [illegible] AC-FT [illegible]
WTR YR 1988 TOTAL 156749 MEAN 428 MAX [illegible] MIN [illegible] AC-FT 31[illegible]

09527000 PILOT KNOB POWERPLANT AND WASTEWAY NEAR PILOT KNOB, CA

LOCATION.--Lat 32°44'15", long 114°42'56", in NW¼SW¼ sec.25, T.16 S., R 21 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 2 mi east of summit of Pilot Knob, 6 mi west of Yuma, AZ, and 20.8 mi downstream from intake of All-American Canal at Imperial Dam.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1939 to current year. Prior to October 1943 monthly discharge only, published in WSP 1313. Prior to October 1956, published as Pilot Knob wasteway near Pilot Knob.

GAGE.--Water-stage recorder in forebay on right bank of All-American Canal (also used as auxiliary gage for sta 09527500); tailrace gage with remote recorder logged hourly in control house, calibrated wicket gates for turbine flow and calibrated bypass gates for wasteway flow which are logged for each change. Datum of forebay staff gage is 150.00 ft; that of tailrace staff gage is 0.00 ft; elevation of sill of bypass gates is 147.88 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. Records good. Daily discharge computed from head and gate openings on wicket gates. Records show water released through Pilot Knob powerplant and wasteway from All-American Canal and returned to Colorado River through Rockwood gates. Pilot Knob wasteway was completed in summer of 1938 and first flow occurred Feb. 5, 1939. Pilot Knob powerplant was completed in January 1957 and first flow occurred Jan. 14, 1957. See table below for monthly return flow by Pilot Knob wasteway only.

COOPERATION.--Daily discharges furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 9,930 ft^3/s Dec. 6, 1985; no flow for long periods.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1500	3570	565	5230	2530	1630	2940	1360	2080	1380	2610	582
2	1500	3560	1180	5460	2210	2220	2620	1150	1110	1450	2750	.00
3	1180	1660	2510	6400	3460	1830	2300	1080	1010	1520	2590	.00
4	1430	1450	1220	7200	3370	1620	2220	1080	1010	1690	2550	.00
5	1740	1600	2090	6030	4730	1420	2720	1080	1010	1740	2630	.00
6	1660	1090	2480	5590	5300	1400	2340	1080	1330	1990	2290	.00
7	1630	1050	3370	6380	5190	1420	2430	1080	1130	2150	2190	.00
8	1400	1480	2480	7420	3850	1440	2380	1080	1120	2140	2000	.00
9	1090	1790	2810	7520	2330	2040	2460	1050	1260	1870	2230	.00
10	1130	1260	2370	8360	2590	2442	2280	1080	1280	1810	2300	.00
11	1520	1760	3310	7760	2920	1880	2350	1040	1540	1990	2530	.00
12	1560	1150	3660	4620	3290	1840	2550	1190	1530	2190	2740	.00
13	2160	952	3340	5520	2870	1780	2180	1170	1530	2340	2330	.00
14	1000	943	2670	5530	2920	1970	2190	1030	1360	2390	2290	.00
15	1050	944	2820	5630	2020	2510	2380	1010	1430	2420	2200	.00
16	1550	968	3710	5820	1770	2640	2240	.00	1280	2360	2040	.00
17	2940	964	5390	5990	1230	2620	4130	.00	1210	2240	2320	.00
18	1710	999	6260	5510	1000	2360	1980	.00	1230	2240	2280	.00
19	1550	1040	5950	4460	1000	2270	2080	.00	1040	2210	2270	.00
20	1750	1040	6290	3860	1000	2020	1580	.00	1450	2300	3200	.00
21	1550	928	6310	4170	1000	2220	1720	.00	1690	2430	3930	.00
22	1220	1000	6800	4940	1010	2770	1590	.00	1750	2430	3170	.00
23	1340	1040	6230	3850	1060	2630	1500	.00	1850	2340	3350	.00
24	1090	1050	6340	3740	1350	3070	1530	.00	1740	2170	2880	.00
25	1590	981	5960	3040	1650	3070	1090	.00	1710	2200	4040	.00
26	1430	999	6300	2210	1010	3050	1230	.00	1670	2360	3700	.00
27	1370	998	6520	1740	1400	2910	1530	.00	1730	2330	2390	.00
28	1770	998	5090	2310	1760	2980	1510	.00	1690	2690	3050	.00
29	2000	998	4380	1880	2360	3160	1620	.00	1730	2760	2870	.00
30	3720	769	4510	3020	---	3130	1510	.00	1880	2700	1710	.00
31	3600	---	5010	2860	---	3150	---	1400	---	2360	1820	---
TOTAL	51730	39101	127985	154370	68860	71550	63480	17990.00	43440	67190	81250	582.00
MEAN	1669	1303	4129	4980	2374	2308	2116	580	1448	2167	2621	19.4
MAX	3720	3570	6800	8360	5300	3160	4130	1400	2080	2760	4040	582
MIN	1000	769	565	1740	1000	1400	1090	.00	1010	1380	1710	.00
AC-FT	102600	77560	253900	306200	136600	141900	125900	35680	86160	133300	161200	1150
(*)	0	0	0	0	0	0	0	0	0	0	0	0

CAL YR	1987	TOTAL	1249503	MEAN	3423	MAX	9070	MIN	565	AC-FT	2478000	(*) 83430
WTR YR	1988	TOTAL	787528.00	MEAN	2152	MAX	8360	MIN	.00	AC-FT	1562000	(*) 0

(*) Return flow, in acre-feet, by Pilot Knob wasteway (included in daily discharge tables).

09527000 PILOT KNOB POWERPLANT AND WASTEWAY NEAR PILOT KNOB, CA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1986 to September 1988 (discontinued).

REMARKS.--Water samples collected by U.S. Bureau of Reclamation.

WATER QUALITY DATA

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)
OCT 1987											
01...	1020	952	26.0	0.100	0.030	0.27	0.30	0.40	1.8	0.010	0.01
14...	0815	987	23.0	0.200	0.030	0.17	0.20	0.40	1.8	0.020	0.02
NOV											
04...	0848	1030	20.5	0.200	0.060	--	<0.20	--	--	0.030	0.03
18...	0810	1080	16.0	0.100	0.070	0.33	0.40	0.50	2.2	0.010	0.01
DEC											
02...	1200	1110	14.5	0.200	0.020	0.38	0.40	0.60	2.7	<0.010	--
16...	1140	959	9.5	0.200	0.020	--	<0.20	--	--	<0.010	--
JAN 1988											
06...	1240	912	13.0	0.200	0.020	0.18	0.20	0.40	1.8	0.020	0.02
20...	0730	964	8.0	0.200	0.020	0.38	0.40	0.60	2.7	0.020	0.02
FEB											
03...	0722	1080	11.0	0.200	0.030	0.27	0.30	0.50	2.2	0.010	0.01
17...	0850	1010	13.5	0.200	0.030	--	<0.20	--	--	0.020	0.02
MAR											
02...	0830	985	15.0	0.300	0.030	0.37	0.40	0.70	3.1	0.010	0.01
16...	1350	943	15.0	0.300	0.010	0.29	0.30	0.60	2.7	<0.010	--
APR											
06...	0815	927	18.0	0.300	0.020	0.28	0.33	0.60	2.7	0.020	0.02
20...	0910	973	18.0	0.300	0.040	0.16	0.20	0.50	2.2	0.020	0.02
MAY											
04...	0910	948	18.0	0.300	0.040	0.16	0.20	[illegible]	[illegible]	0.020	0.02
16...	1025	1140	25.0	0.200	0.050	--	<0.20	--	--	0.020	0.02
JUN											
02...	0915	946	26.0	0.200	0.030	0.37	[illegible]	0.60	2.7	0.020	0.02
15...	1505	1020	26.0	0.200	0.020	0.28	[illegible]	0.50	2.2	0.010	0.01
JUL											
06...	0940	930	26.0	0.200	0.040	0.46	0.50	0.70	3.1	0.010	0.01
20...	0800	966	26.0	0.200	<0.010	--	<0.20	--	--	0.010	0.01
AUG											
03...	0825	966	28.0	0.200	0.040	--	<0.20	--	--	0.030	0.03
17...	1415	978	26.0	0.200	0.030	0.17	0.20	0.40	1.8	0.020	0.02
SEP											
07...	1400	1040	27.0	<0.100	0.090	0.51	0.60	--	--	0.020	0.02
22...	0730	1060	--	0.200	0.020	0.28	0.30	0.50	2.2	0.020	0.02

< Actual value is known to be less than value shown.

09527500 ALL-AMERICAN CANAL BELOW PILOT KNOB WASTEWAY, CA

LOCATION.--Lat 32°44'07", long 114°43'23", in NW¼SE¼ sec.26, T.16 S., R.21 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, on left bank 0.4 mi downstream from Pilot Knob wasteway, 6 mi west of Yuma, Az., 15 mi upstream from turnout to Coachella Canal, and 21.2 mi downstream from intake at Imperial Dam.

PERIOD OF RECORD.--October 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 150.00 ft above National Geodetic Vertical Datum of 1929. Auxiliary water-stage recorder on right bank 0.4 mi upstream, used to determine head on Pilot Knob check gates (also used as forebay gage for sta 09527000, Pilot Knob powerplant and wasteway). Datum of auxiliary gage is 150.00 ft above NGVD.

REMARKS.--No estimated daily discharges. Records excellent. Water is used for power development at four sites below station and for irrigation in Coachella and Imperial Valleys.

COOPERATION.--Daily discharges furnished by Imperial Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 7,610 ft³/s Apr. 27, 28, 1976; no flow Jan. 4, 1967.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5010	961	3510	1500	[illegible]	[illegible]	[illegible]	6360	5400	5980	5620	5110
2	5020	854	3520	1860	2750	[illegible]	[illegible]	6250	5460	5760	5840	4900
3	4830	822	3510	1842	1270	4210	5250	6380	5400	5500	6030	4740
4	4370	1330	3530	2350	1420	3870	[illegible]	6420	5310	5610	6310	4580
5	4470	1210	2820	2540	[illegible]	[illegible]	[illegible]	6460	4990	5690	6120	4600
6	4760	1260	2500	2560	960	3440	6170	6470	5140	5880	5910	5020
7	4910	1300	2640	2970	1050	3370	6240	5760	5170	5450	5970	5210
8	4830	1310	2850	2750	1400	4420	6220	4990	5360	5650	5200	5290
9	4840	1400	3260	2670	1730	4660	6170	5850	5430	5460	5910	5260
10	4620	1940	3170	1960	2170	4840	6170	6190	5370	5380	5960	4950
11	3940	1910	2770	2280	2530	4850	5760	6210	5180	5610	6220	4740
12	3080	2210	2640	2680	2450	4830	5740	6370	5240	5800	6090	4800
13	3350	2370	[illegible]	2780	2720	4870	5540	6210	5450	6060	5840	4900
14	2650	2390	[illegible]	2640	2910	5290	6170	6220	5640	6200	5790	5090
15	2810	2500	[illegible]	[illegible]	3220	5580	5560	6170	5810	6140	5740	5100
16	2720	2830	2790	[illegible]	[illegible]	5610	4850	5940	5910	5930	6000	4810
17	2740	3180	1970	[illegible]	[illegible]	5530	4140	5870	6010	5820	6160	4550
18	2530	3190	1370	[illegible]	4210	5410	4570	6110	5760	6130	6120	4530
19	2940	3070	1710	2170	4250	[illegible]	4310	6470	5640	5740	5350	4570
20	3330	2930	1540	2540	4150	[illegible]	5210	6340	5650	6060	5710	4650
21	3510	2710	1430	2900	4420	[illegible]	5120	5410	5620	6210	5490	4810
22	2790	2400	1350	2520	4250	[illegible]	4300	5650	5420	5440	5140	5000
23	3580	2720	1540	2610	4210	5420	4010	5590	5610	5760	5330	4980
24	3310	3040	1250	2340	4140	5090	3540	5530	5430	5420	4410	4670
25	3110	2940	1170	2760	4470	4330	4480	5560	5120	5670	3780	4710
26	3570	2500	1670	3340	4310	[illegible]	[illegible]	5480	4930	5590	4030	4960
27	3800	2940	1910	3250	3710	5410	5420	5250	4930	5970	4410	5010
28	3680	3190	1920	3460	3580	5450	6270	4830	5410	6040	4160	5190
29	3450	2830	2410	3370	[illegible]	6140	6250	4690	5660	6140	4690	5270
30	2370	3040	2460	3020	---	6340	5660	4770	6080	5660	4950	5080
31	1920	---	2050	2530	---	6440	---	5240	---	5650	5070	---
TOTAL	113840	67437	74830	79960	86820	158700	163900	181600	163590	181290	170980	147020
MEAN	3672	2248	2414	2579	2994	5119	5463	5858	5453	5848	5515	4901
MAX	5020	3190	3590	3460	4470	6440	6270	6460	6080	6440	6310	5290
MIN	1920	822	1170	1500	960	3440	3540	4690	4930	5380	3780	4530
AC-FT	225800	133800	148400	158600	172200	314800	325100	360200	324500	359600	339100	291600

CAL YR 1987 TOTAL 1557877 MEAN 4268 MAX 6610 MIN 822 AC-FT 3090000
WTR YR 1988 TOTAL 1589967 MEAN 4344 MAX 6460 MIN 822 AC-FT 3154000

Return surface flows below Imperial Dam, AZ-CA

09525000. YUMA MAIN CANAL WASTEWAY.--See p. 272.

09527000. PILOT KNOB POWERPLANT AND WASTEWAY.--See p. 274.

09527900. MITTRY LAKE OUTLET CHANNEL.
LOCATION.--Water-stage recorder and sharp-crested weir, in NW¼SE¼ sec.14, T.7 S., R.22 W., Yuma County, Hydrologic Unit 15030107, 1,000 ft upstream from outlet to Colorado River and Laguna Dam.

PERIOD OF RECORD.--October 1974 to May 1983, April 1985 to current year (monthly discharge only).

REMARKS.--Record shows return flow to Colorado River from Mittry Lake.

09528600. LAGUNA CANAL WASTEWAY.
LOCATION.--Nonrecording gage and sharp-crested weir, in SE¼SW¼ sec.14, T.7 S., R.22 W., Yuma County, Hydrologic Unit 15030107, [illegible] ft downstream from Laguna Dam and 0.7 mi upstream from outlet to Colorado River. Water-stage recorder used prior to Oct. 3, 1986.

PERIOD OF RECORD.--October [illegible] to current year (monthly discharge only).

REMARKS.--Record shows waste water from North Gila Valley Irrigation District.

095288[illegible]. LEVEE CANAL WASTEWAY.
LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SW¼ sec.4, T.8 S., R.22 W., Yuma County, Hydrologic Unit 15030107, [illegible] ft upstream from outlet to Colorado River.

PERIOD OF RECORD.--October [illegible] to current year (monthly discharge only).

REMARKS.--Record shows waste water from North Gila Valley Irrigation District.

09529000. NORTH GILA DRAIN NO. 1.
LOCATION.--Water-stage recorder, in [illegible] sec.[illegible], T.8 S., R.22 W., Yuma County, Hydrologic Unit 15030107, 0.25 mi upstream from outlet to Colorado River and 5.5 mi downstream from Laguna Dam.

PERIOD OF RECORD.--October [illegible] to current year (monthly discharge only).

REMARKS.--Record shows waste water from North Gila Valley Irrigation District.

09529050. NORTH GILA DRAIN NO. 2.
LOCATION.--Drain enters wasteway to Gila River in NE¼NE¼ sec.[illegible], T.8 S., R.21 W., Yuma County, Hydrologic Unit 15070201, 1,000 ft upstream from Gila River.

PERIOD OF RECORD.--April [illegible] to current year (monthly discharge only).

REMARKS.--Record shows seepage from Gila Gravity Main Canal.

09529100. FORTUNA WASTEWAY.
LOCATION.--Nonrecording gage and sharp-crested weir, in NE¼ sec.30, T.8 S., R.21 W., Yuma County, Hydrologic Unit 15070201, 1.3 mi upstream from Gila River. Water-stage recorder used prior to Nov. 1, 1986.

PERIOD OF RECORD.--October [illegible] to September [illegible], October 1964 to current year (monthly discharge only).

REMARKS.--Record shows waste water spilled from Gila Gravity Main Canal; flow rarely reaches Gila River.

09529150. NORTH GILA MAIN CANAL WASTEWAY.
LOCATION.--Water-stage recorder, in NE¼SW¼ sec.22, T.8 S., R.22 W., Yuma County, Hydrologic Unit 15070201, 1,000 ft upstream from outlet to Gila River.

PERIOD OF RECORD.--October 1960 to current year (monthly discharge only).

REMARKS.--Record shows waste water from North Gila Valley Irrigation District.

09529160. SOUTH GILA PUMP OUTLET CHANNEL NO. 3.
LOCATION.--In NW¼SE¼ sec.22, T.8 S., R.22 W., Yuma County, Hydrologic Unit 15070201, 0.5 mi upstream from outlet to Gila River.

PERIOD OF RECORD.--January 1965 to current year (monthly discharge only).

REMARKS.--Record shows water pumped from wells in South Gila Valley.

COOPERATION.--Records furnished by U.S. Bureau of Reclamation.

Return surface flows below Imperial Dam, AZ-CA--Continued

09529200. BRUCE CHURCH DRAIN.
LOCATION.--At culvert in NW¼NE¼ sec.21, T.8 S., R.22 W., Yuma County, Hydrologic Unit 15070201, 0.2 mi upstream from outlet to Gila River.

PERIOD OF RECORD.--April 1962 to current year (monthly discharge only).

REMARKS.--Record shows seepage water from parts of secs. 15, 16, and 21 (Bruce Church Ranch).

09529240. SOUTH GILA PUMP OUTLET CHANNEL NO. 2.
LOCATION.--In SW¼NW¼ sec.28, T.8 S., R.22 W., Yuma County, Hydrologic Unit 15070201, 0.6 mi upstream from outlet to Gila River.

PERIOD OF RECORD.--January 1962 to current year (monthly discharge only).

REMARKS.--Record shows water pumped from wells in South Gila Valley.

COOPERATION.--Record furnished by U.S. Bureau of Reclamation.

09529250. BRUCE CHURCH WASTEWAY.
LOCATION.--Water-stage recorder and sharp-crested weir, in SE¼SE¼ sec.20, T.8 S., R.22 W., Yuma County, Hydrologic Unit 15070201, 500 ft upstream from outlet to Gila River.

PERIOD OF RECORD.--October 1960 to current year (monthly discharge only).

REMARKS.--Record shows waste water from North Gila Valley Irrigation District.

09529300. WELLTON-MOHAWK MAIN OUTLET DRAIN (CONVEYANCE CHANNEL).
LOCATION.--Water-stage recorder and Parshall flume in NE¼NW¼ sec.17, T.8 S., R.21 W., Yuma County, Hydrologic Unit 15070201, 7.8 mi upstream from outlet to Gila River (M.O.D.E. 1), which is 0.6 mi upstream from mouth of Gila River.

PERIOD OF RECORD.--October 19[illegible] to current year (monthly discharge only).

REMARKS.--Record shows water pumped from numerous wells in Wellton-Mohawk Irrigation and Drainage District to lower the water table. Flow can be discharged to the Gila River or Colorado River by any one of or combination of four outlets. These outlets are: M.O.D.E. 1 (release to Gila River about 7.8 mi below station); an overflow flume about 11.3 mi below station releases water to Colorado River; M.O.D.E. 2 (see sta 09531800) releases water to Colorado River above Morelos Dam; and M.O.D.E. 3 (see sta 09531900) releases water to Colorado River below Morelos Dam.

09529360. SOUTH GILA PUMP OUTLET CHANNEL NO. 1.
LOCATION.--In SW¼NE¼ sec.30, T.8 S., R.22 W., Yuma County, Hydrologic Unit 15070201, 0.2 mi upstream from outlet to Gila River, which is 0.6 mi upstream from mouth of Gila River.

PERIOD OF RECORD.--August 1961 to current year (monthly discharge only).

REMARKS.--Record shows water pumped from wells in South Gila Valley.

COOPERATION.--Record furnished by U.S. Bureau of Reclamation.

09529400. SOUTH GILA DRAIN NO. 2.
LOCATION.--Near center of sec.24, T.8 S., R.23 W., Yuma County, Hydrologic Unit 15030107, at outlet to Colorado River.

PERIOD OF RECORD.--October 1960 to current year (monthly discharge only).

REMARKS.--Record shows ground-water drainage and occasional waste water from South Gila Valley.

09529420. SOUTH GILA TERMINAL WASTEWAY.
LOCATION.--Water-stage recorder and Parshall flume, in SW¼NW¼ sec.36, T.8 S., R.23 W., Yuma County, Hydrologic Unit 15030107, 2.0 mi upstream from outlet to Colorado River.

PERIOD OF RECORD.--March 1965 to current year (monthly discharge only).

REMARKS.--Record shows waste water from South Gila Canal of South Gila Valley.

09529440. SOUTH GILA PUMP OUTLET CHANNEL NO. 4.
LOCATION.--In NW¼NW¼ sec.26, T.8 S., R.23 W., Yuma County, Hydrologic Unit 15030107, 1.5 mi upstream from outlet to Colorado River.

PERIOD OF RECORD.--July 1965 to current year (monthly discharge only).

REMARKS.--Records show water pumped from wells in South Gila Valley.

COOPERATION.--Records furnished by U.S. Bureau of Reclamation.

Return surface flows below Imperial Dam, AZ-CA--Continued

09529600. RESERVATION DRAIN NO. 7.

LOCATION.--At downstream end of culvert on State Road 24, in NE¼NE¼ sec.33, T.15 S., R.23 E., San Bernardino Meridian, Imperial County, Hydrologic Unit 15030107, 0.5 mi upstream from outlet to Reservation Main Drain.

PERIOD OF RECORD.--March 1966 to current year (monthly discharge only).

REMARKS.--Record shows drainage water from sec.34, T.15 S., R.23 E., in Reservation Division.

09529700. RESERVATION MAIN DRAIN NO. 6.

LOCATION.--Nonrecording gage on upstream right piling of Stallnacker Road Bridge, SE¼SW¼ sec.32, T.15 S., R.23 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107.

PERIOD OF RECORD.--March 1966 to current year (monthly discharge only).

REMARKS.--Record shows waste and drainage water from the Reservation Division.

09529800. RESERVATION DRAIN NO. 2.

LOCATION.--At upstream side of bridge on White Road, in SW¼NW¼ sec.6, T.16 S., R.23 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 0.9 mi upstream from outlet to Reservation Main Drain.

PERIOD OF RECORD.--March 1966 to current year (monthly discharge only).

REMARKS.--Record shows drainage water from sec.31, T.15 S., R.22 E. in Reservation Division.

09529900. RESERVATION DRAIN NO. 3.

LOCATION.--At Jackson Road Bridge, in SE¼SE¼ sec.10, T.16 S., R.22 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 1.0 mi upstream from outlet to Reservation Main Drain.

PERIOD OF RECORD.--March 1966 to current year (monthly discharge only).

REMARKS.--Record shows drainage water from Reservation Division upstream from Yuma Main Canal.

09530000. RESERVATION MAIN DRAIN NO. 4.

LOCATION.--Water-stage recorder in NW¼SE¼ sec.26, T.16 S., R.22 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 500 ft upstream from railroad culvert.

PERIOD OF RECORD.--January 1913 to April 1920, October 1921 to March 1925, January 1934 to current year (monthly discharge only) (calendar year discharge only 1934-36). Prior to October 1955, published as California drainage canal.

REMARKS.--Record shows waste and drainage water from area east of Yuma Main Canal on Reservation Division.

09530200. YUMA MESA OUTLET DRAIN.

LOCATION.--In SE¼SW¼ sec.28, T.16 S., R.22 E., San Bernardino meridian, Yuma County in Arizona, Hydrologic Unit 15030108, 0.3 mi from outlet to Colorado River.

PERIOD OF RECORD.--July 1970 to current year (monthly discharge only).

REMARKS.--Record shows water pumped from wells on the Yuma Mesa and conveyed by underground conduit to Colorado River.

COOPERATION.--Records furnished by Bureau of Reclamation.

WATER-QUALITY.--See p. 283.

09530400. RESERVATION DRAIN NO. 11.

LOCATION.--At outlet to Drain 8-B, in NE¼NE¼ sec.19, T.16 S., R.22 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107.

PERIOD OF RECORD.--March 1966 to current year (monthly discharge only).

REMARKS.--Record shows drainage from sec.20, T.16 S., R.22 E. in Reservation Division.

09530500. DRAIN 8-B.

LOCATION.--Enters Colorado River in SW¼SW¼ sec.19, T.16 S., R.22 E., San Bernardino meridian, Imperial County, Hydrologic Unit 15030107, 4 mi downstream from outlet of Yuma Main Canal wasteway.

PERIOD OF RECORD.--March 1948 to current year (monthly discharge only). Prior to October 1955, published as Araz Drain.

REMARKS.--Record shows waste and drainage water west of Yuma Main Canal on the Reservation Division.

WATER-QUALITY.--See p. 284.

Return surface flows below Imperial Dam, AZ-CA--Continued

09531800. MAIN OUTLET DRAIN EXTENSION ABOVE MORELOS DAM (M.O.D.E. 2).

LOCATION.--Nonrecording gage and Parshall flume, in NW¼NW¼ sec.36, T.16 S., R.21 E., San Bernardino meridian, Yuma County in Arizona, Hydrologic Unit 15030107, at outlet to Colorado River, 1.7 mi upstream from Morelos Dam.

PERIOD OF RECORD.--November 1965 to current year (monthly discharge only).

REMARKS.--Record shows water conveyed to Colorado River, 1.7 mi above Morelos Dam, from Wellton-Mohawk Main Outlet Drain (see sta 09529300).

Return surface flows below Imperial Dam, AZ-CA--Continued

MONTHLY RETURN FLOWS, IN ACRE-FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Month	Mittry Lake Outlet Channel 09527900	Laguna Canal wasteway 09528600	Levee Canal wasteway 09528800	North Gila Drain No. 1 09529000	North Gila Drain No. 3 09529050	Fortuna wasteway 09529100
October	1,290	1.0	532	371	0	132
November	1,140	0	408	215	0	112
December	1.030	0	347	163	0	132
CAL YR 1987	12,970	1.0	3,420	3,480	0	1,200
January	1,150	0	338	126	0	132
February	813	0	397	102	0	109
March	604	0	263	52	0	129
April	560	0	4.1	119	0	131
May	679	0	305	165	0	117
June	738	0	409	251	0	95
July	778	0	280	262	0	82
August	736	0	295	195	0	90
September	744	0	431	137	0	110
WTR YR 1988	10,260	1.0	4,010	2,160	0	1,370

Month	North Gila Main Canal wasteway 09529150	South Gila Pump Outlet Channel No. 3 09529160	Bruce Church Drain 09529200	South Gila Pump Outlet Channel No. 2 09529240	Bruce Church wasteway 09529250
October	329	0	0	1,130	326
November	306	0	0	982	292
December	221	972	0	682	387
CAL YR 1987	2,900	9,160	0	18,230	2,790
January	208	811	0	1,480	314
February	366	972	0	1,380	358
March	235	1,060	0	1,420	258
April	169	841	0	1,750	157
May	188	910	0	1,740	142
June	169	964	0	1,620	171
July	216	1,230	0	1,760	217
August	221	1,290	0	1,280	217
September	358	867	0	1,050	288
WTR YR 1988	2,990	9,910	0	16,270	3,130

Month	Wellton-Mohawk Main Outlet Drain 09529300	South Gila Pump Outlet Channel No. 1 09529360	South Gila Drain No. 2 09529400	South Gila Terminal wasteway 09529420	South Gila Pump Outlet Channel No. 4 09529440
October	8,010	1,630	0	133	0
November	6,810	1,340	0	81	0
December	5,990	1,750	0	74	0
CAL YR 1987	123,700	22,150	0	740	3,620
January	5,820	1,710	0	83	165
February	8,850	1,610	0	111	460
March	10,510	1,420	0	111	633
April	10,700	1,460	0	92	428
May	10,550	1,480	0	72	395
June	9,720	1,500	0	55	426
July	9,520	1,880	0	47	492
August	12,580	1,720	0	187	492
September	12,800	1,770	0	207	456
WTR YR 1988	111,900	19,270	0	1,250	3,950

NOTE.--Yearly totals given above have been computed from total cfs-days and may differ slightly from the summation of monthly total acre-feet on occasion.

Return surface flows below Imperial Dam, AZ-CA--Continued

MONTHLY RETURN FLOWS, IN ACRE-FEET, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

Month	Reservation Drain No. 7 09529600	Reservation Main Drain No. 6 09529700	Reservation Drain No. 2 [illegible]	Reservation Drain No. 3 09529900	Reservation Main Drain No. 4 09530000	Yuma Mesa Outlet Drain 09530200
October	129	1,750	[illegible]	405	3,730	1,750
November	119	1,340	34	378	4,440	1,850
December	123	1,310	[illegible]	363	4,320	2,080
CAL YR 1987	2,340	18,740	[illegible]	4,270	52,770	18,230
January	123	1,200	28	300	3,550	2,090
February	115	1,110	17	274	3,250	2,100
March	123	1,130	[illegible]	283	3,680	2,330
April	119	1,330	42	283	3,630	2,260
May	123	1,260	45	311	4,100	2,230
June	119	1,130	23	305	3,730	1,620
July	123	1,220	26	319	3,710	1,810
August	123	1,240	25	329	4,080	1,400
September	119	1,410	42	288	3,830	1,400
WTR YR 1988	1,460	15,430	[illegible]	3,840	46,060	22,910

Month	Reservation Drain No. 11 09530400	Drain 8-B 09530500	M.O.D.E. 2 (above Morelos Dam) [illegible]
October	90	914	0
November	56	738	0
December	25	528	0
CAL YR 1987	980	9,380	0
January	49	454	0
February	45	363	0
March	43	439	0
April	36	414	0
May	32	351	0
June	25	301	0
July	25	355	0
August	25	475	0
September	24	510	0
WTR YR 1988	475	5,840	0

NOTE.--Yearly totals given above have been computed from total cfs-day and may differ slightly from the summation of monthly total acre-feet on occasion.

09530200 YUMA MESA OUTLET DRAIN AT YUMA, AZ

LOCATION.--Lat 32°43'48", long 114°39'27", in SE¼SW¼ sec.28, T.16 S., R.22 E., San Bernardino meridian, in Arizona, Yuma County, Hydrologic Unit 15030107, at gaging station, 0.3 mi from outlet to Colorado River, and 0.5 mi west of Joe Henry Memorial Park in Yuma, Ariz.

PERIOD OF RECORD.--July 1972 to September 1984, October 1986 to September 1988 (discontinued).

COOPERATION.--Water samples collected by U.S. Bureau of Reclamation.

WATER QUALITY DATA

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN, TOTAL (MG/L AS NO3) (71887)	PHOSPHOROUS TOTAL (MG/L AS P) (00665)	PHOSPHOROUS ORGANIC TOTAL (MG/L AS P) (00670)
OCT 1987											
01...	1036	2260	25.5	1.90	0.030	0.27	0.30	2.2	9.7	0.020	0.02
14...	0710	2250	25.0	1.50	<0.010	--	<0.20	--	--	0.010	0.01
NOV											
04...	0930	2220	25.5	1.40	0.050	--	<0.20	--	--	<0.010	--
18...	0800	2530	21.0	1.40	0.020	--	<0.20	--	--	0.020	0.02
DEC											
02...	1235	2220	15.5	1.40	0.010	0.19	0.20	1.6	7.1	0.010	0.01
16...	1215	2220	21.0	1.40	0.020	--	<0.20	--	--	0.010	0.01
JAN 1988											
06...	1215	2220	23.0	1.40	0.020	--	<0.20	--	--	0.010	0.01
20...	0753	2210	23.0	1.50	0.010	0.39	0.40	1.9	8.4	0.020	0.02
FEB											
03...	0800	2230	23.0	1.40	0.040	0.16	0.20	1.6	7.1	0.030	0.03
17...	0915	2230	19.5	1.40	0.020	--	<0.20	--	--	0.020	0.02
MAR											
02...	0810	2220	24.0	1.20	0.030	0.27	0.30	1.5	6.6	0.020	0.02
16...	1323	2230	24.0	1.30	0.020	0.28	0.30	1.6	7.1	0.020	0.02
APR											
06...	0845	1730	24.0	1.30	0.020	0.18	0.20	1.5	6.6	0.020	0.02
20...	0940	2220	24.0	1.30	0.030	0.17	0.20	1.5	6.6	0.020	0.02
MAY											
04...	1000	2220	24.0	1.30	0.020	--	<0.20	--	--	0.020	0.02
18...	1050	2230	25.5	1.70	0.020	1.1	1.1	2.8	12	0.020	0.02
JUN											
02...	0945	2320	28.0	0.700	0.020	--	<0.20	--	--	0.050	0.05
15...	1520	2350	25.0	1.30	0.020	0.28	0.30	1.6	7.1	0.010	0.01
JUL											
06...	1000	2340	25.0	1.30	0.060	0.44	0.50	1.8	8.0	0.020	0.02
20...	0830	2240	23.0	1.30	<0.010	--	0.60	1.9	8.4	0.020	0.02
AUG											
03...	0810	2190	28.0	1.20	<0.010	--	<0.20	--	--	0.030	0.03
17...	1440	2220	24.0	1.20	0.020	0.28	0.30	1.5	6.6	0.020	0.02
SEP											
07...	1406	2210	27.0	1.10	<0.010	--	0.40	1.5	6.6	0.020	0.02
22...	0750	2250	--	1.20	<0.010	--	0.30	1.5	6.6	0.020	0.02

< Actual value is known to be less than value shown.

09530500 DRAIN 8-B NEAR YUMA, AZ

LOCATION.--Lat 32°44'39", long 114°41'45", in NE¼NW¼ sec.30, T.16 S., R.22 E., San Bernardino meridian, in California, Imperial County, Hydrologic Unit 15030107, 0.5 mi upstream from outlet to Colorado River, and 4 mi west of Yuma.

PERIOD OF RECORD.--October 1962 to September 1973, October 1973 to September 1981, October 1986 to September 1988 (discontinued).

REMARKS.--Unpublished chemical analyses for water years 1962-68 available from district office in Tucson, Ariz.

WATER QUALITY DATA

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHOROUS TOTAL (MG/L AS P) (00665)	PHOS- PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)
OCT 1987									
01...	1028	1420	24.5	<0.100	0.200	0.40	0.60	0.050	0.05
14...	0645	1540	21.0	<0.100	0.190	0.31	0.50	0.130	0.13
NOV									
04...	0900	1580	21.0	<0.100	0.220	0.08	0.30	0.020	0.02
18...	0840	1470	19.0	<0.100	0.190	0.31	0.50	0.050	0.05
DEC									
02...	1212	1480	19.5	<0.100	0.190	0.21	0.40	0.060	0.06
16...	1155	1440	18.0	<0.100	0.220	0.28	0.50	0.050	0.05
JAN 1988									
06...	1230	1510	18.0	<0.100	0.250	0.15	0.40	0.070	0.07
20...	0740	1560	14.0	<0.100	0.280	0.22	0.50	0.100	0.10
FEB									
03...	0730	1480	15.0	<0.100	0.250	0.35	0.60	0.080	0.08
17...	0900	1410	16.5	<0.100	0.260	0.24	0.50	0.060	0.06
MAR									
02...	0840	1490	18.0	<0.100	0.230	0.47	0.70	0.050	0.05
16...	1340	1440	22.0	<0.100	0.130	0.27	0.40	0.050	0.05
APR									
06...	0830	1360	18.0	<0.100	0.210	0.39	0.60	0.070	0.07
20...	0920	1370	20.0	<0.100	0.150	0.25	0.40	0.090	0.09
MAY									
04...	0915	1410	20.0	<0.100	0.170	0.43	0.60	0.060	0.06
18...	1035	1290	23.5	<0.100	0.140	0.16	0.30	0.060	0.06
JUN									
02...	0925	1280	26.5	<0.100	0.150	0.25	0.40	0.020	0.02
15...	1450	1260	28.0	<0.100	0.070	0.63	0.70	0.050	0.05
JUL									
06...	0930	1260	24.0	<0.100	0.150	0.55	0.70	0.060	0.06
20...	0815	1340	23.0	<0.100	0.190	--	<0.20	0.070	0.07
AUG									
03...	0835	1250	24.0	<0.100	0.300	0.50	0.80	0.050	0.05
17...	1420	1340	29.0	<0.100	0.320	0.68	1.0	0.150	0.15
SEP									
07...	1333	1260	28.0	<0.100	0.300	0.40	0.70	0.070	0.07
22...	0740	1280	--	<0.100	0.280	0.12	0.40	0.070	0.07

< Actual value is known to be less than value shown.

SAN SIMON WASH BASIN

09535100 SAN SIMON WASH NEAR PISINIMO, AZ

LOCATION.--Lat 32°02'39", long 112°22'13", in SE¼ sec.9, T.16 S., R.1 W. (unsurveyed), Pima County, Hydrologic Unit 15080101, in Tohono O'Odham Indian Reservation, on the right bank about 100 ft downstream from road, just upstream from Gu Vo Wash, and 3.2 mi west of Pisinimo.

DRAINAGE AREA.--569 mi^2.

PERIOD OF RECORD.--February 1972 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,830 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--16 years, 4.05 ft^3/s, 2,930 acre-ft/yr; median of yearly mean discharges, 2.7 ft^3/s, 2,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,[illegible] ft^3/s Sept. 24, 1976, gage height, 10.82 ft, from rating curve extended above 1,700 ft^3/s on basis of slope-area measurement of peak flow; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	0630	970	7.19	Aug. 22	1730	1,020	7.26
aJuly 10	unknown	963	7.15	Aug. 24	0445	691	6.67
July 30	2115	625	6.51	Aug. 29	0400	*1,740	*8.00

a About

No flow for most of year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	281	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	6.4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.41	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	22	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	242	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.2	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	1.1	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	2.8	.00	.00	.00	.48	.00
22	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	217	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	11	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	116	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.5	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	33	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	82	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1070	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	70	534	.00
31	.00	---	.00	.00	---	.00	---	.00	---	4.4	1.2	---
TOTAL	0.00	287.81	1.10	0.00	0.00	0.00	2.84	0.00	0.00	339.60	2066.18	0.00
MEAN	.00	9.59	.035	.00	.00	.00	.095	.00	.00	11.0	66.7	.00
MAX	.00	281	1.1	.00	.00	.00	2.8	.00	.00	242	1070	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	571	2.2	.0	.0	.0	5.6	.0	.0	674	4100	.0

CAL YR 1987 TOTAL 727.47 MEAN 1.99 MAX 297 MIN .00 AC-FT 1440
WTR YR 1988 TOTAL 2697.53 MEAN 7.37 MAX 1070 MIN .00 AC-FT 5350

SAN SIMON WASH BASIN

09535300 VAMORI WASH AT KOM VO, AZ

LOCATION.--Lat 31°57'04", long 112°20'50", in NW¼ sec.14, T.17 S., R.1 W (unsurveyed), Pima County, Hydrologic Unit 15080101, in Tohono O'Odham Indian Reservation, on right bank 200 ft downstream from road crossing, 0.6 mi south of Kom Vo (Santa Cruz Village) and 5 mi upstream from mouth.

DRAINAGE AREA.--1,250 mi^2, approximately, of which about 250 mi^2 is in Mexico.

PERIOD OF RECORD.--February 1972 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,770 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records fair.

AVERAGE DISCHARGE.--16 years, 11.0 ft^3/s, 7,970 acre-ft/yr; median of yearly mean discharges, 8.2 ft^3/s, 5,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft^3/s Oct. 3, 1983, gage height, 10.54 ft, from rating curve extended above 550 ft^3/s on basis of slope area measurement of peak flow; no flow for most of each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 1	1130	616	8.46	Aug. 23	0445	447	8.01
July 30	2400	634	8.50	Aug. 29	0230	*768	*8.76

No flow for most of year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	218	.00	.00	.00	.00	.00	.00	.00	.00	16	e15
2	.00	64	.00	.00	.00	.00	.00	.00	.00	.00	10	e.50
3	.00	29	.00	.00	.00	.00	.00	.00	.00	.00	e5.0	.00
4	.00	5.4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	83	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.6	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	26	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	247	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	31	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.1	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.34	16	.00	.00	.00	.00	.00	29	e80	.00
20	.00	.00	38	9.3	.00	.00	.00	.00	.00	65	115	.00
21	.00	.00	5.4	.93	.00	.00	.00	.00	.00	50	95	.00
22	.00	.00	.62	.00	.00	.00	.00	.00	.00	48	218	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	101	362	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	10	59	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	16	90	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	43	40	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	32	26	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	5.9	e70	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.2	216	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	116	27	.00
31	.00	---	.00	.00	---	.00	---	.00	---	110	79	---
TOTAL	0.00	317.23	44.36	26.23	0.00	0.00	0.00	0.00	0.00	940.80	1508.00	15.50
MEAN	.00	10.6	1.43	.85	.00	.00	.00	.00	.00	30.3	48.6	.52
MAX	.00	218	38	16	.00	.00	.00	.00	.00	247	362	15
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.0	629	88	52	.0	.0	.0	.0	.0	1870	2990	31

CAL YR	1987	TOTAL	2159.48	MEAN	5.92	MAX	227	MIN	.00	AC-FT	4280
WTR YR	1988	TOTAL	2852.12	MEAN	7.79	MAX	362	MIN	.00	AC-FT	5660

e Estimated

09535900 QUITOBAQUITO SPRING NEAR LUKEVILLE, AZ

LOCATION.--Lat 31°56'37", long 113°01'10", in SE¼, sec.18, T.17 S., R.7 W. (unsurveyed), Pima County, Hydrologic Unit 15080102, in Organ Pipe Cactus National Monument, in spring outlet channel 50 ft downstream from first source, 500 ft downstream from second source, and 12.8 mi northwest of Lukeville.

PERIOD OF RECORD.--September 1917 (one discharge measurement, published in WSP 499), October 1981 to current year. Gage-heights and discharge measurements collected at this site, January 1974 to May 1976, are in the files of the National Park Service.

GAGE.--Water-stage recorder and V-notch weir. Elevation of gage is 1,080 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Record is for flow from the two principal spring openings. Numerous small spring openings in the area discharge downstream from the gage.

COOPERATION.--Channel upstream is maintained by National Park Service to prevent flow from bypassing gage.

AVERAGE DISCHARGE.--7 years, 0.063 ft^3/s, 46 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 0.33 ft^3/s Sept. 29, 1983, gage height, 1.51 ft, includes local runoff; minimum, 0.02 ft^3/s Aug. 18, 1983, gage height, 1.25 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 0.23 ft^3/s Aug. 20, 1700 hours, gage height, 1.46 ft, includes local runoff; minimum, 0.03 ft^3/s Oct. 16, 17, gage height, 1.28 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.05	.05	.05	.07	.07	.09	e.06	.06	.06	.05	e.07
2	.05	.05	.05	.05	.07	.07	.09	e.06	.06	.06	.05	e.07
3	.05	.05	.05	.05	.07	.09	.09	e.06	.05	.06	.05	e.07
4	.05	.05	.05	.05	.07	.09	.09	e.06	.05	.06	.05	e.07
5	.05	.05	.05	.05	.07	.08	.09	e.06	.05	.06	.05	e.07
6	.05	.05	.05	.05	.07	.08	.09	e.06	.05	.06	.05	e.07
7	.05	.05	.05	.05	.08	.08	.09	e.05	.05	.06	.05	e.07
8	.05	.05	.05	.05	.08	.08	.09	e.05	.05	.06	.05	e.07
9	.05	.05	.05	.05	.08	.08	.08	e.05	.05	.06	.05	e.07
10	.05	.05	.05	.05	.08	.08	e.07	e.05	.05	.06	.05	e.07
11	.05	.05	.05	.05	.07	.08	.06	.05	.05	.06	.05	e.07
12	.05	.05	.05	.05	.05	.08	.06	.05	.05	.06	.05	e.07
13	.05	.05	.05	.05	.05	.08	.06	.05	.05	.06	.05	e.07
14	.05	.05	.05	.06	.05	.08	.06	.05	.05	.06	.06	e.07
15	.05	.05	.05	.06	.05	.08	.06	.05	.05	.06	.06	e.06
16	.03	.05	.05	.06	.05	.08	.06	.05	.05	.06	.06	e.06
17	.03	.05	.05	.06	.05	.08	.06	.05	.05	.06	.06	e.06
18	.04	.05	.05	.07	.05	.08	.06	.05	.05	.06	.06	e.06
19	.05	.05	.05	.07	.05	.08	.06	.05	.06	.06	.06	e.06
20	.05	.05	.05	.07	.05	.08	.07	.05	.06	.06	.08	e.06
21	.05	.05	.05	.07	.05	.09	.07	.05	.06	.06	.07	e.06
22	.05	.05	.05	.07	.06	.09	.07	.05	.06	.06	.07	e.06
23	.05	.05	.05	.07	.06	.09	.07	.05	.06	.06	e.07	e.06
24	.05	.05	.05	.07	.06	.09	.07	.05	.06	.06	e.07	e.06
25	.05	.05	.05	.07	.06	.09	.07	.05	.06	.06	e.07	e.06
26	.05	.05	.05	.07	.06	.09	.07	.05	.06	e.06	e.07	e.06
27	.05	.05	.05	.07	.06	.09	.07	.05	.06	e.05	e.07	e.06
28	.05	.05	.05	.07	.07	.09	.07	.05	.06	.05	e.07	e.06
29	.05	.05	.05	.07	.07	.09	.07	.05	.06	.05	e.07	e.06
30	.05	.05	.05	.07	---	.08	.07	.05	.06	.05	e.07	e.06
31	.05	---	.05	.07	---	.09	---	.05	---	.05	e.07	---
TOTAL	1.50	1.50	1.55	1.87	1.81	2.58	2.18	1.61	1.64	1.81	1.87	1.94
MEAN	.048	.050	.050	.060	.062	.083	.073	.052	.055	.058	.060	.065
MAX	.05	.05	.05	.07	.08	.09	.09	.06	.06	.06	.08	.07
MIN	.03	.05	.05	.05	.05	.07	.06	.05	.05	.05	.05	.06
AC-FT	3.0	3.0	3.1	3.7	3.6	5.1	4.3	3.2	3.3	3.6	3.7	3.8

CAL YR 1987 TOTAL 15.98 MEAN .044 MAX .06 MIN .02 AC-FT 32
WTR YR 1988 TOTAL 21.86 MEAN .060 MAX .09 MIN .03 AC-FT 43

e Estimated

WHITEWATER DRAW BASIN

09537200 LESLIE CREEK NEAR McNEAL, AZ

LOCATION.--Lat 31°35'24", long 109°30'30", in SE¼NE¼ sec 20, T 21 S., R 28 E., Cochise County, Hydrologic Unit 15080301, on right bank 10 mi east of McNeal.

DRAINAGE AREA.--79.1 mi².

PERIOD OF RECORD.--October 1969 to September 1977, July 1982 to current year.

GAGE.--Water-stage recorder and concrete control with shallow sharp-crested V-notch weir. Elevation of gage is 4,620 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

AVERAGE DISCHARGE.--14 years (water years 1970-77, 1983-88), 1.34 ft³/s, 971 acre-ft/yr; median of yearly mean discharges, 1.0 ft³/s, 720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,600 ft³/s July 21, 1984, gage height, 8.54 ft, from rating curve extended above 12 ft³/s on basis of slope-area measurements of peak flow at gage height 7.33 ft and 8.54 ft; no flow for many days in 1976 and 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, October 1977 to July 1982, 468 ft³/s, date unknown, gage height, 4.76 ft in gage well.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)
July 10	2400	182	4.31
July 20	0215	*250	*4.41

Minimum daily discharge, 0.24 ft³/s Sept. 29, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	.91	.77	.61	.37	.41	[illegible]	.44	.57	.35	.32	.42
2	.73	.94	.77	.60	.37	[illegible]	[illegible]	.45	.57	.34	1.9	.41
3	.70	.95	.77	.59	.34	[illegible]	[illegible]	.45	.56	.33	.89	.41
4	.68	.92	.77	.57	.33	[illegible]	.46	.45	.53	.34	1.0	.38
5	.69	.94	.77	.56	.33	.52	.47	.44	.56	.33	1.1	.37
6	.69	.95	.77	.58	.30	.41	.49	.44	.55	.34	3.6	.35
7	.68	.95	.77	.57	.30	.48	.49	.44	.56	.34	2.3	.35
8	.68	.96	.77	.58	.30	.45	.47	.45	.57	.33	7.8	.32
9	.63	.97	.77	.58	.30	.45	.46	.45	.54	.33	.39	.31
10	.63	.96	.77	.54	.30	.41	.46	.45	.53	5.0	.33	.30
11	.64	.98	.77	.54	.29	.41	.45	.53	.45	9.7	.31	.35
12	.65	1.0	.76	.51	.29	.40	.46	.53	.48	.58	.29	.33
13	.67	1.0	.78	.46	.29	.37	.47	.54	.49	.56	.29	.31
14	.80	.92	.77	.51	.28	.37	.54	.53	.50	.50	.29	.29
15	.77	.78	.77	.51	.28	.37	.53	.53	.47	.46	.30	.28
16	.77	.81	.77	.52	.28	.37	.50	.53	.44	.52	.30	.28
17	.78	.82	.80	.52	.27	.39	.49	.53	.45	.51	.29	.29
18	.81	.86	.90	.51	.27	.55	.46	.53	.46	.56	2.0	.28
19	.84	.87	.82	.50	.27	.61	.46	.54	.44	.61	.40	.27
20	.81	.88	.80	.48	.28	.60	.45	.55	.39	17	.37	.29
21	.83	.86	.77	.50	.29	.52	.46	.57	.37	.40	.42	.32
22	.87	.87	.77	.46	.27	.50	.42	.57	.35	.39	.33	.29
23	.89	.88	.75	.46	.40	.53	.41	.56	.34	.38	1.6	.28
24	.88	.88	.71	.41	.54	.56	.41	.58	.31	.38	.39	.26
25	.83	.81	.71	.41	.54	.49	.44	.61	.35	.36	.35	.26
26	.82	.77	.71	.38	.54	.50	.45	[illegible]	.31	.36	.34	.26
27	.82	.77	.67	.37	.54	.50	.45	[illegible]	.40	.36	.46	.26
28	.81	.77	.65	.37	.54	.50	.45	.60	.36	.36	.77	.26
29	.86	.77	.67	.37	.54	.50	.45	.59	.35	.40	.42	.24
30	.85	.77	.63	.38	---	.50	.46	.58	.35	.39	.41	.24
31	.87	---	.61	.37	---	.50	---	[illegible]	---	.53	.44	---
TOTAL	23.70	26.54	23.29	15.34	10.24	14.85	13.90	16.22	13.60	43.34	30.40	9.26
MEAN	.76	.88	.75	.49	.35	.48	.46	.52	.45	1.40	.98	.31
MAX	.89	1.0	.90	.61	.54	.61	.54	.61	.57	17	7.8	.42
MIN	.63	.77	.61	.37	.27	.37	.41	.44	.31	.33	.29	.24
AC-FT	47	53	46	30	20	29	28	32	27	86	60	18

CAL YR 1987 TOTAL 377.65 MEAN 1.03 MAX 84 MIN .33 AC-FT 749
WTR YR 1988 TOTAL 240.68 MEAN .66 MAX 17 MIN .24 AC-FT 477

EXPLANATION
STATION EQUIPPED WITH CREST-STAGE GAGE ONLY
STATION EQUIPPED WITH CREST-STAGE GAGE AND FLOOD-HYDROGRAPH RECORDER
DOUGLAS

Figure 7.--Map of Arizona showing locations of partial-record gaging stations.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites

Crest-stage partial-record stations

The following table contains annual maximum discharges of independent peaks at crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, and discharge measurements may have been made for purposes of establishing the stage-discharge relation, but these are not published herein. The years given in the period of record represent water years fo which the annual maximum has been determined.

Annual maximum discharge at crest-stage partial-record stations during water year 1988

Station No.	Station name	Location	Drainage area (mi²)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft³/s)
		Little Colorado River basin					
09397100	Leroux Wash near Holbrook, AZ	Lat 34°54'18", long 110°12'03", SE¼NE¼NE¼ sec.3, T.17 N., R.20 E., Navajo County, near center of bridge in east-bound lane of Interstate Highway 40, 0.5 mi upstream from mouth and 2.5 mi west of Holbrook.	809	1980-88	11- 2-87	11.04	4,000
09397500	Chevelon Creek below Wildcat Canyon near Winslow, AZ	Lat 34°38'11", long 110°42'49", in SW¼ sec.36, T.15 N., R.15 E., Navajo County, Sitgreaves National Forest, on right bank 0.4 mi downstream from Wildcat Canyon and 25 mi south of Winslow.	a271	1947-70*, 1982-88	2-27-88	6.42	1,170
		Gila River basin					
09470500	San Pedro River at Palominas, AZ	Lat 31°22'48", long 110°06'35", in SW¼SE¼ sec.33, T.23 S., R.22 E., Cochise County, near left bank on downstream side of pier of bridge on State Highway 92, 0.7 mi east of Palominas, 2.5 mi upstream from Green Brush Draw, 4.5 mi downstream from international boundary, and 12 mi southwest of Bisbee.	b741	1930-33*, 1935-41*, 1950-81*, 1982-88	9-11-88	11.93	7,020
09482000	Santa Cruz River at Continental, AZ	Lat 31°52'17", long 110°58'46", in SE¼SE¼ sec.11, T.18 S., R.13 E. (unsurveyed), Pima County, Hydrologic Unit 15050301, in Spanish land grant of San Ignacio de La Canoa, on right bank 0.8 mi northeast of Green Valley Post Office and 1.5 mi downstream of town of Continental.	c1,682	1940-46*, 1951-86*, 1988	7-28-88	4.75	930
09482485	Cholla Wash at Tucson, AZ	Lat 32°12'00", long 110°59'47", in SW¼SE¼NE¼ sec.22, T.14 S., R.13 E., Pima County, 263 ft upstream from culvert on Mission Road, at the northwest corner of the intersection of Mission Road and Silverlake Road, in Tucson (revised).	1.27	1982-88	8-23-88	d2.20	208
09483042	Cemetery Wash at Tucson, AZ	Lat 32°15'50", long 110°58'42", in NE¼NE¼ sec.35, T.13 S., R.13 E., Pima County, 270 ft west of U.S. Highway 89, 300 ft south of projection of Ft. Lowell Road in Tucson.	1.17	1966-88	8-20-88	2.51	216
09483045	Flowing Wells Wash at Tucson, AZ	Lat 32°15'55", long 110°59'40", in SW¼SW¼ sec.26, T.13 S., R.13 E., Pima County, at intersection of Ft. Lowell Road and Flowing Wells Road in Tucson city limits.	3.53	1971-88	8-19-88	4.39	438

See footnotes at end of the table.

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
Gila River basin--Continued							
09483250	Rob Wash at Tucson, AZ	Lat 32°14'08", long 110°48'58", in NE¼NW¼ sec.8, T.14 S., R.15 E., Pima County, at Speedway Blvd., 0.4 mi east of Pantano Road, and 1 mi north of East Broadway in Tucson city limits.	2.08	1971-88	8-20-88	----	1,300
09484000	Sabino Creek near Tucson, AZ	Lat 32°19'00", long 110°48'35", in SE¼NE¼ sec.9, T.13 S., R.15 E., Pima County, 0.5 mi north of Coronado National Forest boundary, and 12 mi northeast of Tucson city hall.	35.5	1932-74*, 1975-88	8-20-88	1.90	350
09484500	Tanque Verde Creek at Tucson, AZ	Lat 32°15'54", long 110°50'27", in NE¼NE¼ sec.31 T.13 S., R.15 E., Pima County, at Sabino Canyon Road, 1 mi downstream from Sabino Creek, and 0.8 mi north of Tucson city limits (revised.)	219	1940-45*, 1968-81, 1988	8-20-88	9.29	3,700
09484530	Craycroft Wash Tributary near Tucson, AZ	Lat 32°18'05", long 110°52'13", in NW¼ sec.13, T.13 S., R.14 E., Pima County, at Paseo Arenal, 0.4 mi south of Sunrise Drive and 0.25 mi east of Craycroft Road.	0.038	1982-88	8-20-88	1.16	13
09484600	Pantano Wash near Vail, AZ	Lat 32°02'09", long 110°40'37", in SW¼SE¼ sec.14, T.16 S., R.16 E., Pima County, 60 ft upstream from dam, 2.2 mi southeast of Vail, and 20 mi southeast of Tucson city hall.	457	1959-74*, 1975-88	7-29-88	12.57	7,420
09485000	Rincon Creek near Tucson, AZ	Lat 32°07'46", long 110°37'32", in NW¼NE¼ sec.17, T.15 S., R.17 E., Pima County, 9 mi upstream from mouth, and 22 mi southeast of Tucson city hall.	44.8	1952-74*, 1975-88	8- 2-88	6.94	2,640
09485450	Pantano Wash at Broadway Blvd, at Tucson, AZ	Lat 32°13'14", long 110°49'44", in NW¼NE¼ sec.17 T.14 S., R.15 E., Pima County, near right bank on downstream side of eastbound bridge on Broadway Blvd., 4.6 mi upstream from mouth, and 8.3 mi east of intersection with Stone Avenue in Tucson.	599	1979-81, 1984,1988	10- 1-83 7-30-88	8.60 4.89	[a]11,000 3,400
09485570	Alamo Wash at Tucson, AZ	Lat 32°15'31", long 110°53'01", in SE¼SE¼NW¼ sec.35 T.13 S., R.14 E., Pima County, 270 ft downstream from Glenn Street, 0.5 mi east of the intersection of Glenn Street and Swan Road in Tucson.	9.56	1979-88	8-20-88	7.34	4,000
09485700	Rillito Creek at Dodge Blvd, at Tucson, AZ	Lat 32°16'17", long 110°54'50", in NW¼SE¼ sec.28, T.13 S., R.14 E., at downstream side of bridge on Dodge Blvd., 0.4 mi north of intersection of Ft. Lowell Road and Dodge Blvd. in Tucson, AZ.	871	1988	8-20-88	7.79	5,900
09486050	Roller Coaster Wash near Tucson, AZ	Lat 32°18'09", long 111°00'12", in SE¼SE¼NW¼ sec.15, T.13 S., R.13 E., Pima County, at Oracle-Jaynes Road, 0.3 mi upstream from the mouth and 1.4 mi north of Tucson city limits.	1.75	1982-88	8-20-88	2.94	143
09505200	Wet Beaver Creek near Rimrock, AZ	Lat 34°40'29", long 111°40'17", in NW¼SW¼ sec.24, T.15 N., R.6 E., Yavapai County, in Coconino National Forest, on right bank 4.5 mi northeast of Rimrock and 5.7 mi upstream from Red Tank Draw.	111	1961-82*, 1983-88	2- 3-88	10.15	3,900
09512090	Indian Bend Wash at Shea Boulevard at Phoenix, AZ	Lat 33°35'05", long 111°58'10", in SW¼SW¼SE¼ sec.20, T.3 N., R.4 E., Maricopa County, on left bank 500 ft upstream from Shea Boulevard bridge.	41.2	1984-88	8-21-88	2.77	2,700

See footnotes at end of the table.

Station No.	Station name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Gila River basin--Continued					
09512300	Cave Creek near Cave Creek, AZ	Lat 33°47'10", long 112°04'00", in SW¼ sec.12, T.5 N., R.3 E., Maricopa County, on left bank 200 ft upstream from Prescott to Mesa transmission line, 4.8 mi southwest of town of Cave Creek, and 5.0 mi upstream from Cave Creek Dam.	121	1958-67*, 1968-79, 1981-88	8-21-88	2.51	170
09513650	Agua Fria River at El Mirage, AZ	Lat 33°36'24", long 112°18'14" in NW¼NW¼ sec.16, T.3 N., R.1 E., Maricopa County, at Grand Avenue, 0.75 mi southeast of El Mirage.	e1,637	1963-79, 1981-88	8-21-88	4.28	370
09514200	Waterman Wash near Buckeye, AZ	Lat 33°19'49", long 112°30'33", in SW¼NE¼ sec.24, T.1 S., R.3 W., Maricopa County, 2.4 mi above mouth, 5.2 mi southeast of Buckeye	403	1964-88	12-17-87	5.01	1,430
09517260	Centennial Wash at Narrows Dam near Salome, AZ	Lat 33°43'29", long 113°30'46", in SW¼SE¼ sec.33, T.5 N., R.12 W., La Paz County, on left bank end of Narrows Dam, 7.4 mi southeast of Salome.	684	1982-88	8-22-88	16.22	540
09520300	Alamo Wash tributary near Ajo, AZ	Lat 32°06'00", long 112°46'15", in SW¼ sec.22, T.15 S., R.5 W. (unsurveyed), Pima County, at State Highway 85, 20 mi southeast of Ajo.	90	1963-75, 1978, 1980, 1982-88	----	----	f
		Whitewater Draw basin					
09537500	Whitewater Draw near Douglas, AZ	Lat 31°21'08", long 109°35'04", in SW¼SE¼ sec.10, T.24 S., R.27 E., Cochise County, on downstream side of pier of bridge on U.S. Highway 80, 1.5 mi upstream from international boundary and 2 mi west of Douglas.	1,023	1947-82*, g1983-88	8-26-88	8.26	172

* Operated as a continuous-record gaging station.
a Revised
b Includes an area of 649 mi^2 in Mexico.
c Includes an area of 395 mi^2 in Mexico.
d New site and datum.
e Includes 1,459 square miles above Lake Pleasant that is noncontributing except during occasional periods of spills from Waddell Dam; does not include the area tributary to McMicken Dam from which water is diverted to the Agua Fria River. Diversions from McMicken Dam have negligible effect on peak flows of the Agua Fria River.
f No evidence of flow during year.
g Record furnished by International Boundary and Water Commission.

Discharge measurements at miscellaneous sites

Measurements of streamflow at points other then gaging stations are given in the following table. Those that are measurements of base flow are designated by one asterisk (*); measurements of peak flow by two asterisks (**).

Discharge measurements made at miscellaneous sites during water year 1988

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	 Discharge (ft^3/s)
		San Juan River basin				
Laguna Creek	Chinle Wash	Lat 36°44'57", long 110°08'08", unsurveyed, Navajo County, Hydrologic Unit 14080204 about 7 mi east of Kayenta.	229	1982-87	1-28-88 3-23-88	*1.89 3.00
		Little Colorado River basin				
Little Colorado River (09385700)	Colorado River	Lat 34°27'02", long 109°21'42", in NE¼SW¼SE¼ sec.10, T.12 N., R.28 E., Apache County, Hydrologic Unit 15020002 1.2 mi downstream from Salado Spring, 2.2 mi upstream from irrigation district diversion dam, and 4.2 mi upstream from State Highway 61 bridge in St. Johns.	845	1940-41, 1975-87	3-18-88	7.25
Yucce Flat Wash	Moenkopi Wash	Lat 36°24"51', long 110°24'51", Navajo County, Hydrologic Unit 15020018, at mouth, 17 mi southeast of Shonto.	26.8	----	8- 7-87	**9,500
Coal Mine Wash (09401239)	Moenkopi Wash	Lat 36°25'34", long 110°26'32", Navajo County, Hydrologic Unit 15020018, in Navajo-Hopi Indian joint-use area, at former gaging station 0.3 mi upstream from mouth, and 16 mi southeast of Shonto.	119a	1978-82b	8-26-88	**25,000
		Gila River basin				
Pinal Creek	Salt River	Lat 33°32'26", long 110°52'26" in SE¼SW¼SW¼ sec.6, T.2, N., R.15 E., Gila County, Hydrologic Unit 15060103 1.5 mi downstream from Hicks crossing, 3.2 mi upstream from Inspiration Dam, 7.0 mi upstream from mouth, and 11 mi northwest of Globe.	---	----	7-30-87 9-23-87 6-28-88 7-20-88 9-20-88	4.82 5.25 4.27 3.84 3.39

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a Revised; drainage area reduced due to coal mining activities. Actual contributing drainage area for flood was about 39 mi^2.

b Operated as a continuous-record station.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988

MISCELLANEOUS STATION ANALYSES

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
342453109241001 LITTLE COLORADO R AB SALADO SPGS NR ST JOHNS, AZ (LAT 34 24 53N LONG 109 24 10W)												
MAR 1988 16...	0850	2.54	2220	8.2	7.0	5.5	--	620	8.5	84	--	--
09394500 LITTLE COLORADO R AT WOODRUFF, ARIZ. (LAT 34 46 58N LONG 110 02 37W)												
AUG 1988 30...	1445	249	325	9.0	35.5	19.0	5500	--	--	--	--	--
09512830 BOULDER CREEK NR ROCK SPRINGS AZ. (LAT 33 59 55N LONG 112 12 57W)												
SEP 1988 16...	1035	0.017	491	7.9	29.0	25.5	2.0	710	5.2	69	64	K95
09512860 HUMBUG CREEK, NEAR CASTLE HOT SPRINGS, AZ (LAT 33 58 02N LONG 112 17 34W)												
SEP 1988 01...	1225	3.29	534	8.0	34.0	29.0	1.9	720	6.9	96	280	290
09512970 COTTONWOOD CREEK NR WADDELL DAM AZ. (LAT 33 53 55N LONG 112 18 39W)												
SEP 1988 02...	1210	0.062	870	8.1	36.0	35.0	1.2	720	4.8	73	310	230

DATE	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	HY-DROXIDE WATER DIS IT FIELD MG/L AS OH (71834)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
342453109241001 LITTLE COLORADO R AB SALADO SPGS NR ST JOHNS, AZ (LAT 34 24 53N LONG 109 24 10W)												
MAR 1988 16...	560	160	130	57	280	5	18	500	400	0	--	410
09394500 LITTLE COLORADO R AT WOODRUFF, ARIZ. (LAT 34 46 58N LONG 110 02 37W)												
AUG 1988 30...	--	--	--	--	--	--	--	--	--	--	--	--
09512830 BOULDER CREEK NR ROCK SPRINGS AZ. (LAT 33 59 55N LONG 112 12 57W)												
SEP 1988 16...	200	0	42	23	31	1	3.4	280	--	0	0	230
09512860 HUMBUG CREEK, NEAR CASTLE HOT SPRINGS, AZ (LAT 33 58 02N LONG 112 17 34W)												
SEP 1988 01...	200	22	52	18	37	1	3.7	220	--	0	0	180
09512970 COTTONWOOD CREEK NR WADDELL DAM AZ. (LAT 33 53 55N LONG 112 18 39W)												
SEP 1988 02...	340	0	72	38	65	2	6.7	460	--	0	0	380

K Based on non-ideal colony count.

MISCELLANEOUS STATION ANALYSES

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)
342453109241001 LITTLE COLORADO R AB SALADO SPGS NR ST JOHNS, AZ (LAT 34 24 53N LONG 109 24 10W)												
MAR 1988 16...	510	280	2.1	18	--	1540	2.09	--	--	--	<0.10	--
09394500 LITTLE COLORADO R AT WOODRUFF, ARIZ (LAT 34 46 58N LONG 110 02 37W)												
AUG 1988 30...	30	19	0.5	28	213		--	0.37	0.03	0.40	0.42	<0.01
09512830 BOULDER CREEK NR ROCK SPRINGS AZ. (LAT 33 59 55N LONG 112 12 57W)												
SEP 1988 16...	13	14	0.2	44	316	311	0.43			<0.10	<0.10	--
09512860 HUMBUG CREEK, NEAR CASTLE HOT SPRINGS, AZ (LAT 33 58 02N LONG 112 17 34W)												
SEP 1988 01...	78	16	0.5	34	355	348	0.48		--	<0.10	<0.10	--
09512970 COTTONWOOD CREEK NR WADDELL DAM AZ. (LAT 33 53 55N LONG 112 18 39W)												
SEP 1988 02...	42	46	0.6	77	561	573	[illegible]		--	<0.10	<0.10	--

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, TOTAL (MG/L AS N) (00600)	NITRO-GEN, TOTAL (MG/L AS NO3) (71887)	PHOS-PHOROUS TOTAL (MG/L AS P) (00665)	PHOS-PHOROUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	PHOS-PHOROUS ORGANIC TOTAL (MG/L AS P) (00670)	PHOS-PHOROUS ORGANIC DIS-SOLVED (MG/L AS P) (00673)
342453109241001 LITTLE COLORADO R AB SALADO SPGS NR ST JOHNS, AZ (LAT 34 24 53N LONG 109 24 10W)											
MAR 1988 16...	--	--	--	--	--	--	--	<0.01	--	--	--
09394500 LITTLE COLORADO R AT WOODRUFF, ARIZ (LAT 34 46 58N LONG 110 02 37W)											
AUG 1988 30...	0.02	0.3	0.7	3.1	3.00	0.22	0.18	0.11	0.34	2.8	0.11
09512830 BOULDER CREEK NR ROCK SPRINGS AZ. (LAT 33 59 55N LONG 112 12 57W)											
SEP 1988 16...	--	0.4	--	--	0.05	0.04	--	0.03	0.09	0.05	0.01
09512860 HUMBUG CREEK, NEAR CASTLE HOT SPRINGS, AZ (LAT 33 58 02N LONG 112 17 34W)											
SEP 1988 01...	--	0.6	--	--	0.04	0.03	--	0.03	0.09	0.04	0.0
09512970 COTTONWOOD CREEK NR WADDELL DAM AZ. (LAT 33 53 55N LONG 112 18 39W)											
SEP 1988 02...	--	0.5	--	--	0.06	0.05	--	0.04	0.12	0.06	0.01

< Actual value is known to be less than value shown.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988--Continued

MISCELLANEOUS STATION ANALYSES

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)
342453109241001 LITTLE COLORADO R AB SALADO SPGS NR ST JOHNS, AZ (LAT 34 24 53N LONG 109 24 10W)											
MAR 1988 16 ..	--	--	--	--	--	--	--	--	480	--	--
09394500 LITTLE COLORADO R AT WOODRUFF, ARIZ. (LAT 34 46 58N LONG 110 02 37W)											
AUG 1988 30...	310000	1600	10	7	2400	23	20	360	120	<1	<1
09512830 BOULDER CREEK NR ROCK SPRINGS AZ. (LAT 33 59 55N LONG 112 12 57W)											
SEP 1988 16...	--	--	21	19	<100	40	--	110	60	<1	<1
09512860 HUMBUG CREEK, NEAR CASTLE HOT SPRINGS, AZ (LAT 33 58 02N LONG 112 17 34W)											
SEP 1988 01...	--	--	9	9	<100	54	--	110	90	<1	1
09512970 COTTONWOOD CREEK NR WADDELL DAM AZ. (LAT 33 53 55N LONG 112 18 33W)											
SEP 1988 02...	--	--	12	12	300	110	--	120	110	<1	2

DATE	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR) (01032)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)
342453109241001 LITTLE COLORADO R AB SALADO SPGS NR ST JOHNS, AZ (LAT 34 24 53N LONG 109 24 10W)											
MAR 1988 16...	--	--	--	--	--	--	--	--	10	--	--
09394500 LITTLE COLORADO R AT WOODRUFF, ARIZ. (LAT 34 46 58N LONG 110 02 37W)											
AUG 1988 30...	130	--	1	50	<1	--	<1	32000	410	--	<5
09512830 BOULDER CREEK NR ROCK SPRINGS AZ. (LAT 33 59 55N LONG 112 12 57W)											
SEP 1988 16...	1	2	--	--	--	2	1	320	120	<5	<5
09512860 HUMBUG CREEK, NEAR CASTLE HOT SPRINGS, AZ (LAT 33 58 02N LONG 112 17 34W)											
SEP 1988 01...	2	2	--	--	--	12	11	230	42	<5	<5
09512970 COTTONWOOD CREEK NR WADDELL DAM AZ. (LAT 33 53 55N LONG 112 18 33W)											
SEP 1988 02...	2	1	--	--	--	3	3	130	31	<5	<5

< Actual value is known to be less than value shown.

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES
WATER YEAR OCTOBER 1987 TO SEPTEMBER 1988--Continued

MISCELLANEOUS STATION ANALYSES

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)
342453109241001 LITTLE COLORADO R AB SALADO SPGS NR ST JOHNS, AZ (LAT 34 24 53N LONG 109 24 10W)											
MAR 1988 16...	--	150	--	--	--	--	--	--	--	--	--
09394500 LITTLE COLORADO R AT WOODRUFF, ARIZ. (LAT 34 46 58N LONG 110 02 37W)											
AUG 1988 30...	10000	10	0.2	0.10	1	1	<1	<1	<1	<2	<1.0
09512830 BOULDER CREEK NR ROCK SPRINGS AZ. (LAT 33 59 55N LONG 112 12 57W)											
SEP 1988 16...	450	420	<0.1	<0.10	--	--	--	<1	<1	<1	<1.0
09512860 HUMBUG CREEK, NEAR CASTLE HOT SPRINGS, AZ (LAT 33 58 02N LONG 112 17 34W)											
SEP 1988 01...	160	100	0.4	<0.10	--	--	--	<1	<1	<1	<1.0
09512970 COTTONWOOD CREEK NR WADDELL DAM AZ. (LAT 33 53 55N LONG 112 18 39W)											
SEP 1988 02...	480	440	0.1	<0.10	--	--	--	<1	<1	1	<1.0

DATE	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR) (01082)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	CYANIDE TOTAL (MG/L AS CN) (00720)	CYANIDE DISSOLVED (MG/L AS CN) (00723)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
342453109241001 LITTLE COLORADO R AB SALADO SPGS NR ST JOHNS, AZ (LAT 34 24 53N LONG 109 24 10W)											
MAR 1988 16...	--	--	--	--	--	--	--	--	--	--	--
09394500 LITTLE COLORADO R AT WOODRUFF, ARIZ. (LAT 34 46 58N LONG 110 02 37W)											
AUG 1988 30...	5300	42	48	450	<3	--	--	--	--	--	--
09512830 BOULDER CREEK NR ROCK SPRINGS AZ. (LAT 33 59 55N LONG 112 12 57W)											
SEP 1988 16...	--	--	--	<10	6	6.8	0.6	<0.01	<0.01	10	0.0
09512860 HUMBUG CREEK, NEAR CASTLE HOT SPRINGS, AZ (LAT 33 58 02N LONG 112 17 34W)											
SEP 1988 01...	--	--	--	<10	7	8.7	0.5	<0.01	<0.01	2	0.02
09512970 COTTONWOOD CREEK NR WADDELL DAM AZ. (LAT 33 53 55N LONG 112 18 39W)											
SEP 1988 02...	--	--	--	<10	10	8.2	0.3	<0.01	<0.01	31	0.01

< Actual value is known to be less than value shown.

09482427 SOUTH INTERCEPTOR CANAL AT TUCSON AZ

WATER QUALITY DATA

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKALINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)
JUL 1988												
27...	1745	0.20	266	8.25	27.0	49	48	0	40	6900	3	<100
27...	1800	325	120	7.70	31.0	--	--	--	--	160000	6	2000

DATE	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI) (01132)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)
JUL 1988												
27...	<10	1	7	5	70	4200	77	20	210	--	7	23
27...	<10	15	150	20	930	95000	500	180	4800	<0.10	5	200

DATE	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	ACENAPHTHENE TOTAL (UG/L) (34205)	ACENAPHTHYLENE TOTAL (UG/L) (34200)	ANTHRACENE TOTAL (UG/L) (34220)	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L) (34526)	BENZO B FLUORANTHENE TOTAL (UG/L) (34230)	BENZO K FLUORANTHENE TOTAL (UG/L) (34242)	BENZOGHI PERYLENE1,12-BENZOPERYLENE TOTAL (UG/L) (34521)	BENZO-A-PYRENE TOTAL (UG/L) (34247)
JUL 1988												
27...	<1	1	270	4	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<10.0
27...	<1	2	120	2	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<10.0

DATE	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L) (34636)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L) (34292)	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L) (34278)	BIS 2-CHLORO ETHYL ETHER TOTAL (UG/L) (34273)	BIS (2-CHLOROISOPROPYL) ETHER TOTAL (UG/L) (34283)	2-CHLOROPHENOL TOTAL (UG/L) (34586)	2-CHLORONAPHTHALENE TOTAL (UG/L) (34581)	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L) (34636)	4-CHLOROPHENYL PHENYL ETHER TOTAL (UG/L) (34641)	CHRYSENE TOTAL (UG/L) (34320)	1,2,5,6-DIBENZ-ANTHRACENE TOTAL (UG/L) (34556)	1,2-DICHLOROBENZENE TOTAL (UG/L) (34536)
JUL 1988												
27...	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0	<5.0
27...	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<10.0	<5.0

DATE	1,3-DICHLOROBENZENE TOTAL (UG/L) (34566)	1,4-DICHLOROBENZENE TOTAL (UG/L) (34571)	DIETHYL PHTHALATE TOTAL (UG/L) (34336)	DIMETHYL PHTHALATE TOTAL (UG/L) (34341)	DI-N-BUTYL PHTHALATE TOTAL (UG/L) (39110)	2,4-DINITROTOLUENE TOTAL (UG/L) (34611)	2,6-DINITROTOLUENE TOTAL (UG/L) (34626)	2-NITROPHENOL TOTAL (UG/L) (34591)	2,4-DICHLOROPHENOL TOTAL (UG/L) (34601)	2,4-DIMETHYLPHENOL TOTAL (UG/L) (34606)	2,4,-DINITROPHENOL TOTAL (UG/L) (34616)	2,4,6-TRICHLOROPHENOL TOTAL (UG/L) (34621)
JUL 1988												
27...	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20.0	<20.0
27...	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20.0	<20.0

DATE	DI-N-OCTYL PHTHALATE TOTAL (UG/L) (34596)	BIS(2-ETHYL HEXYL) PHTHALATE TOTAL (UG/L) (39100)	FLUORANTHENE TOTAL (UG/L) (34376)	FLUORENE TOTAL (UG/L) (34381)	HEXACHLOROBENZENE TOTAL (UG/L) (39700)	HEXACHLOROBUTADIENE TOTAL (UG/L) (39702)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L) (34386)	HEXACHLOROETHANE TOTAL (UG/L) (34396)	INDENO (1[illegible]3-CD) PYRENE TOTAL (UG/L) (34403)	ISOPHORONE TOTAL (UG/L) (34408)	NAPHTHALENE TOTAL (UG/L) (34696)	NITROBENZENE TOTAL (UG/L) (34447)
JUL 1988												
27...	<10.0	<13.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
27...	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0

DATE	N-NITROSODIMETHYLAMINE TOTAL (UG/L) (34438)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L) (34428)	N-NITROSODIPHENYLAMINE TOTAL (UG/L) (34433)	PARACHLOROMETA CRESOL TOTAL (UG/L) (34452)	PHENANTHRENE TOTAL (UG/L) (34461)	PHENOL (C6H5OH) TOTAL (UG/L) (34694)	PENTACHLOROPHENOL TOTAL (UG/L) (39032)	4-NITROPHENOL TOTAL (UG/L) (34646)	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/L) (34657)	PYRENE TOTAL (UG/L) (34469)	1,2,4-TRICHLOROBENZENE TOTAL (UG/L) (34551)
JUL 1988											
27...	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<30.0	<30.0	<30.0	<5.0	<5.0
27...	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<30.0	<30.0	<30.0	<5.0	<5.0

< Actual value is known to be less than value shown.

09485390 ATTERBURY WASH TRIBUTARY AT TUCSON,ARIZONA

WATER QUALITY DATA

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)
AUG 1988												
02...	0915	2.3	87	8.20	6000	100	<10	<1	5	4	20	3900

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI) (01130)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)
AUG 1988												
02...	14	[illegible]	150	<0.10	<1	9	<1	<1	60	<1	0.7	15

DATE	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	ACENAPHTHENE TOTAL (UG/L) (34205)	ACENAPHTHYLENE TOTAL (UG/L) (34200)	ANTHRACENE TOTAL (UG/L) (34220)	BENZENE TOTAL (UG/L) (34030)	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L) (34526)	BENZO B FLUORANTHENE TOTAL (UG/L) (34230)	BENZO K FLUORANTHENE TOTAL (UG/L) (34242)	BENZOGHI PERYLENE1,12-BENZOPERYLENE TOTAL (UG/L) (34521)
AUG 1988												
02...	2.7	[illegible]	[illegible]	11	<5.0	<5.0	<5.0	<3.0	<5.0	<10.0	<10.0	<10.0

DATE	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BROMOFORM TOTAL (UG/L) (32104)	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L) (34636)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L) (34292)	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L) (34278)	BIS 2-CHLOROETHYL ETHER TOTAL (UG/L) (34273)	BIS (2-CHLOROISOPROPYL) ETHER TOTAL (UG/L) (34283)	CARBONTETRACHLORIDE TOTAL (UG/L) (32102)	CHLOROBENZENE TOTAL (UG/L) (34301)	CHLOROETHANE TOTAL (UG/L) (34311)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)
AUG 1988												
02...	<10.0	<3.0	<5.0	<5.0	<5.0	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0

DATE	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRACHLOROETHANE TOTAL (UG/L) (34516)	2-CHLOROETHYLVINYLETHER TOTAL (UG/L) (34576)	2-CHLOROPHENOL TOTAL (UG/L) (34586)	CHLORODIBROMOMETHANE TOTAL (UG/L) (32105)	CHLOROFORM TOTAL (UG/L) (32106)	2-CHLORONAPHTHALENE TOTAL (UG/L) (34581)	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L) (34636)	4-CHLOROPHENYL PHENYL ETHER TOTAL (UG/L) (34641)	CHRYSENE TOTAL (UG/L) (34320)
AUG 1988												
02...	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<3.0	<3.0	<5.0	<5.0	<5.0	<10.0

DATE	1,2,5,6-DIBENZ-ANTHRA-CENE TOTAL (UG/L) (34556)	ETHYLBENZENE TOTAL (UG/L) (34371)	1,2-DICHLOROBENZENE TOTAL (UG/L) (34536)	1,2-DICHLORO ETHANE TOTAL (UG/L) (32103)	1,2-DIBROMO ETHYLENE TOTAL (UG/L) (39082)	1,3-DICHLOROBENZENE TOTAL (UG/L) (34566)	1,4-DICHLOROBENZENE TOTAL (UG/L) (34571)	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)
AUG 1988												
02...	<10.0	<3.0	<5.0	<3.0	<3.0	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0

DATE	1,2-TRANSDICHLOROETHENE TOTAL (UG/L) (34546)	1,3-DICHLOROPROPENE TOTAL (UG/L) (34561)	DIETHYL PHTHALATE TOTAL (UG/L) (34336)	DIMETHYL PHTHALATE TOTAL (UG/L) (34341)	DI-N BUTYL PHTHALATE TOTAL (UG/L) (39110)	2,4-DINITROTOLUENE TOTAL (UG/L) (34611)	2,6-DINITROTOLUENE TOTAL (UG/L) (34626)	2-NITROPHENOL TOTAL (UG/L) (34591)	2,4-DICHLOROPHENOL TOTAL (UG/L) (34601)	2,4-DIMETHYLPHENOL TOTAL (UG/L) (34606)	2,4,-DINITROPHENOL TOTAL (UG/L) (34616)
AUG 1988											
02...	<3.0	<3.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<20.0

< Actual value is known to be less than value shown.

09485390 ATTERBURY WASH TRIBUTARY AT TUCSON, ARIZONA

WATER QUALITY DATA

DATE	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L) (34621)	DI-N-OCTYL PHTHAL-ATE TOTAL (UG/L) (34596)	BIS(2-ETHYL HEXYL) PHTHAL-ATE TOTAL (UG/L) (39100)	FLUOR-ANTHENE TOTAL (UG/L) (34376)	FLUOR-ENE TOTAL (UG/L) (34381)	HEXA CHLORO BENZENE TOTAL (UG/L) (39700)	HEXA-CHLORO BUT-ADIENE TOTAL (UG/L) (39702)	HEXA CHLORO-CYCLO-PENT ADIENE TOTAL (UG/L) (34386)	HEXA CHLORO-ETHANE TOTAL (UG/L) (34396)	[illegible]	[illegible]
AUG 1988											
02...	<20.0	<10.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	[illegible]	[illegible]

DATE	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	NAPHTH-ALENE TOTAL (UG/L) (34696)	NITRO BENZENE TOTAL (UG/L) (34447)	N-NITRO-SODI METHY LAMINE TOTAL (UG/L) (34438)	N NITRO SODI-N PROPYL AMINE TOTAL (UG/L) (34428)	N-NITRO SODI PHENYL-LAMINE TOTAL (UG/L) [illegible]	[illegible]	[illegible]
AUG 1988										
02...	<3.0	<3.0	<3.0	<5.0	<5.0	<5.0	<5.0	[illegible]	[illegible]	[illegible]

DATE	PENTA-CHLORO-PHENOL TOTAL (UG/L) (39032)	4-NITRO-PHENOL TOTAL (UG/L) (34646)	4,6-DINITRO-ORTHO-CRESOL TOTAL (UG/L) (34657)	PYRENE TOTAL (UG/L) (34469)	TETRA-CHLORO ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO FLUORO METHANE TOTAL (UG/L) (34488)	TOLUENE TOTAL (UG/L) [illegible]	1,2,4-TRI CHLORO BENZENE TOTAL [illegible]	[illegible]
AUG 1988									
02...	<30.0	<30.0	<30.0	<5.0	<3.0	<3.0	[illegible]	[illegible]	[illegible]

< Actual value is known to be less than value shown

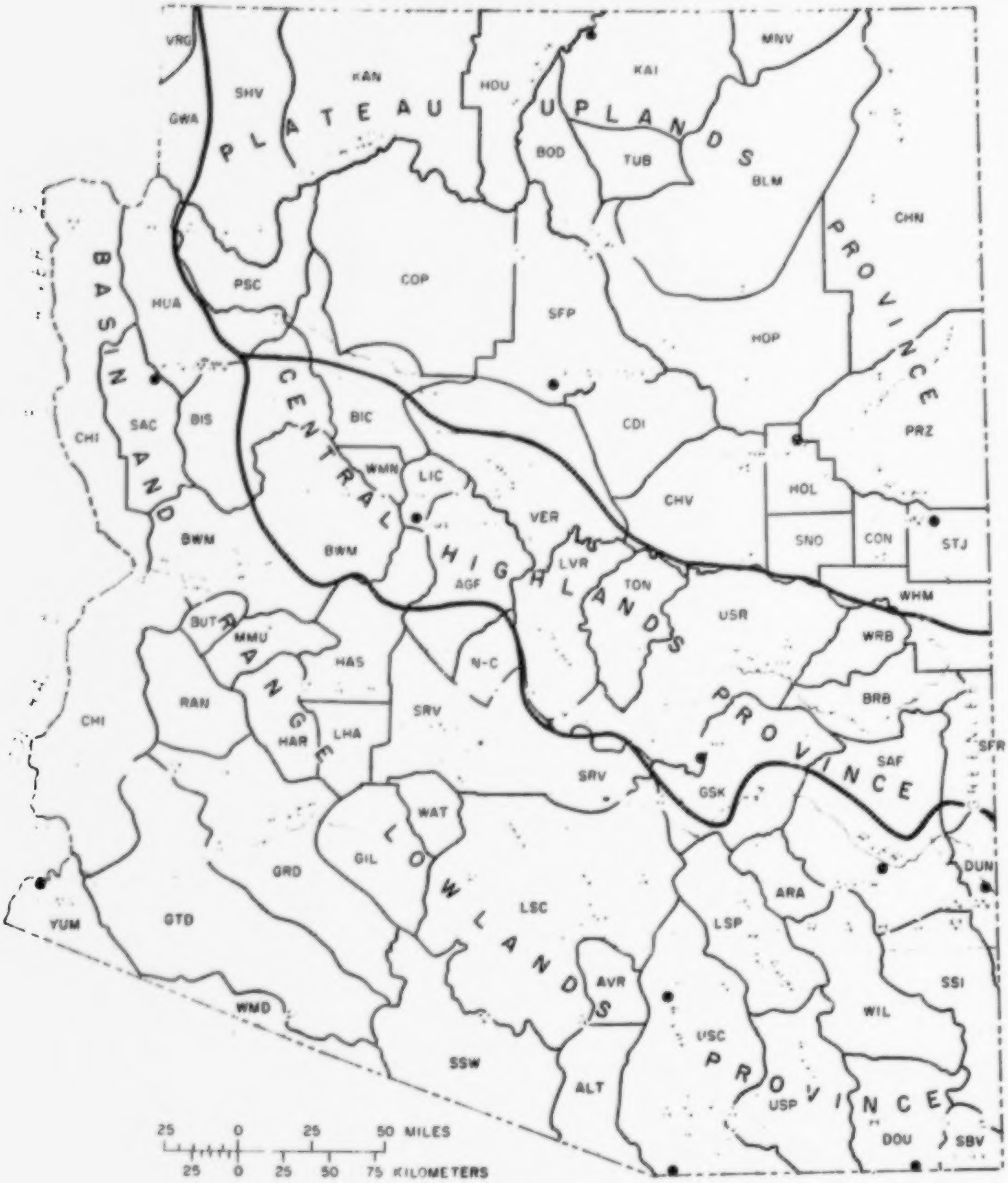
PLATEAU UPLANDS PROVINCE
CENTRAL HIGHLANDS PROVINCE
BASIN AND RANGE LOWLANDS PROVINCE
VRG
KAN
HOU
KAI
MNV
SHV
GWA
BOD
TUB
BLM
CHN
PSC
COP
HUA
SFP
HOP
SAC
BIS
BIC
CDI
PRZ
CHI
WMN
LIC
HOL
CHV
VER
SNO
CON
STJ
BWM
BWM
LVR
AGF
TON
WHM
USR
BUT
MMU
HAS
N-C
WRB
RAN
BRB
CHI
SRV
LHA
HAR
SFR
SAF
SRV
GSK
WAT
GIL
GRD
DUN
ARA
YUM
GTD
LSC
LSP
AVR
SSI
WMD
WIL
USC
SSW
ALT
USP
DOU
SBV
25
0
25
50 MILES
25
0
25
50
75 KILOMETERS

Figure 8.--Index map of ground-water areas in Arizona.

GROUND-WATER AREAS AND ABBREVIATIONS

AGF = Agua Fria basin
ALT = Altar Valley
ARA = Aravaipa Valley
AVR = Avra Valley
BIC = Big Chino Valley
BIS = Big Sandy Valley
BWM = Bill Williams
BLM = Black Mesa
BRB = Black River basin
BOD = Bodaway Mesa
BUT = Butler Valley
CDI = Canyon Diablo
CHV = Chevelon
CHN = Chinle
COP = Coconino Plateau
CHI = Colorado River, Hoover Dam to Imperial Dam
CON = Concho
DOU = Douglas basin
DUN = Duncan basin
GIL = Gila Bend basin
GRD = Gila River from Painted Rock Dam to Texas Hill
GSK = Gila River from head of San Carlos Reservoir to Kelvin
GTD = Gila River from Texas Hill to Dome
GWA = Grand Wash
HAR = Harquahala Plains
HAS = Hassayampa basin
HOL = Holbrook
HOP = Hopi
HOU = House Rock
HUA = Hualapai Valley
KAI = Kaibito
KAN = Kanab
LIC = Little Chino Valley
LHA = Lower Hassayampa
LSP = Lower San Pedro basin
LSC = Lower Santa Cruz basin
LVR = Lower Verde River
MMU = McMullen Valley
MNV = Monument Valley
N-C = New River-Cave Creek
PSC = Peach Springs Canyon
PRZ = Puerco-Zuni
RAN = Ranegras Plain
SAC = Sacramento Valley
SAF = Safford basin
SRV = Salt River Valley
SBV = San Bernardino Valley
SFP = San Francisco Peaks
SFR = San Francisco River basin
SSI = San Simon basin
SSW = San Simon Wash
SHV = Shivwits
SNO = Snowflake
STJ = St. Johns
TON = Tonto basin
TUB = Tuba City
USR = Upper Salt River basin
USP = Upper San Pedro basin
USC = Upper Santa Cruz basin
VER = Upper Verde River
VRG = Virgin River
WAT = Waterman Wash
WMD = Western Mexican drainage
WHM = White Mountains
WRB = White River basin
WIL = Willcox basin
WMN = Williamson Valley
YUM = Yuma

SITE INFORMATION

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
AGF	[illegible]	4	13	335650	1121628	15070102	H	343.0	321.0	-
	[illegible]	4	25	340404	1120844	15070102	H	60.0	40.0	59.0
									59.0	60.0
	[illegible]	4	25	340421	1120758	15070102	H	112.0	-	-
	[illegible]	4	25	342655	1120545	15070102	S	250.0	-	-
	[illegible]	4	25	342450	1120718	15070102	S	140.0	-	-
	[illegible]		25	343157	1121346	15070102	S	200.0	90.0	200.0
	[illegible]		25	343232	1121536	15070102	H	160.0	-	-
	[illegible]	4	25	343227	1121705	15070102	H	330.0	230.0	330.0
	[illegible]		25	343107	1121506	15070102	H	130.0	-	-
	[illegible]	4	25	343549	1121624	15070102	U	1100.0	100.0	640.0
									660.0	1100.0
	[illegible]	4	25	343423	1121701	15070102	U	796.0	100.0	790.0
	[illegible]		25	343353	1121444	15070102	U	606.0	-	-
	[illegible]	4	25	343415	1121614	15070102	I	345.0	-	-
	[illegible]		25	343400	1121616	15070102	H	309.0	30.0	-
	[illegible]	4	25	343346	1121529	15070102	U	400.0	-	-
	[illegible]	4	25	343414	1121626	15070102	I	690.0	-	-
	[illegible]		25	343906	1121547	15070102	U	378.0	-	-
	[illegible]		25	343628	1121930	15070102	U	500.0	196.0	496.0
									496.0	500.0
	[illegible]	4	25	343601	1122053	15060201	U	996.0	400.0	774.0
									774.0	996.0
	[illegible]		25	343453	1122034	15070102	U	612.0	310.0	-
	[illegible]		25	343444	1122110	15070102		670.0	250.0	-
	[illegible]	4	25	343423	1121856	15070102	H	346.0	246.0	346.0
	[illegible]	4	25	343343	1121838	15070102		121.0	120.0	121.0
	[illegible]	4	25	343413	1121934	15070102		357.0	30.0	357.0
	[illegible]		25	343332	1122059	15070102		-	-	-
ALT	[illegible]		19	320113	1112213	15050304	I	240.0	-	-
	[illegible]	4	19	320414	1111930	15050304	P	400.0	160.0	220.0
									244.0	400.0
	[illegible]		19	320313	1112032	15050304	I	232.0	163.0	220.0
									228.0	232.0
	[illegible]		19	320009	1112004	15050304	P	1000.0	417.0	997.0
	[illegible]		19	320001	1111836	15050304	U	875.0	-	-
	[illegible]		19	320311	1111440	15050304	P	802.0	-	-
	[illegible]		19	320308	1111316	15050304	P	1200.0	-	-
	[illegible]		19	315830	1112306	15050304	I	500.0	261.0	500.0
	[illegible]	4	19	315241	1112403	15050304	S	610.0	-	-
	[illegible]		19	314830	1112431	15050304	H	376.0	-	-
	[illegible]		19	314657	1112715	15050304	H	712.0	-	-
	[illegible]		19	313850	1112957	15050304	H	650.0	495.0	595.0
									598.0	650.0
	[illegible]		19	314135	1112631	15050304	S	480.0	120.0	480.0
	[illegible]		19	313927	1111606	15050301	U	263.0	20.0	263.0
	[illegible]		19	313428	1113015	15050304	S	400.0	-	-
	[illegible]		19	312946	1113345	15080200	H	160.0	-	-
	[illegible]		19	312900	1113232	15050304	U	-	-	-
	[illegible]		19	312827	1113033	15080200	U	430.0	-	-
ARA	[illegible]		9	324902	1101849	15050203	I	150.0	136.0	-
	[illegible]		9	324413	1091355	15040006	I	140.0	-	-
	[illegible]	4	9	323753	1100806	15050203	S	-	-	-
AVR	[illegible]	4	19	322852	1112021	15050304	I	443.0	154.0	430.0
									433.0	443.0
	[illegible]	4	19	322732	1111817	15050303	I	600.0	145.0	-
	[illegible]	4	19	322636	1111814	15050304	U	3210.0	-	-
	[illegible]	4	19	322627	1112043	15050304	I	500.0	-	-
	[illegible]	4	19	322509	1111932	15050304	I	1200.0	-	-
	[illegible]	4	19	322339	1111919	15050304	I	508.0	180.0	504.0
	[illegible]	4	19	321853	1111658	15050304	I	1010.0	-	-
	[illegible]	4	19	322244	1111740	15050304		840.0	-	-
	[illegible]	4	19	322219	1111728	15050304	I	504.0	190.0	500.0
	[illegible]	4	19	322041	1112157	15050304	U	528.0	-	-
	[illegible]	4	19	322008	1112134	15050304		757.0	400.0	757.0
	[illegible]	4	19	322009	1111953	15050304	U	1380.0	-	-
	[illegible]	4	19	322009	1111918	15050304	I	600.0	260.0	535.0
									252.0	372.0
									372.0	923.0
									908.0	998.0
									998.0	1000.0
	[illegible]	4	19	322245	1111404	15050304	I	375.0	200.0	370.0
	[illegible]	4	19	322208	1111403	15050304	I	695.0	200.0	677.0
	[illegible]	4	19	322108	1111531	15050304	U	639.0	187.0	639.0
	[illegible]	4	19	322107	1111520	15050304		1300.0	1000.0	1300.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
AVR--Cont.	D-13-10 04DDD	4	19	321917	1111918	15050304	P	855.0	250.0 600.0	592.0 802.0
	D-13-10 14BCC	4	19	321757	1111809	15050304	I	602.0	270.0	600.0
	D-13-10 14CDC	4	19	321732	1111753	15050304	I	596.0	290.0	586.0
	D-13-10 15DDD	4	19	321732	1111815	15050304	I	814.0	285.0	805.0
	D-13-10 20BCD	4	19	321703	1112103	15050304		627.0	400.0	627.0
	D-13-10 20CCD	4	19	321639	1112108	15050304	I	515.0	200.0 494.0	475.0 515.0
	D-13-10 22DDD	4	19	321639	1111816	15050304	I	590.0	260.0	580.0
	D-13-10 24DCC	4	19	321639	1111633	15050304	U	575.0	247.0	564.0
	D-13-10 26CCD	4	19	321546	1111759	15050304	I	700.0	310.0	685.0
	D-13-10 26DCD	4	19	321546	1111729	15050304	I	705.0	319.0	695.0
	D-13-11 11ACD	4	19	321851	1111126	15050304	H	458.0	308.0 408.0	403.0 458.0
	D-13-11 31CCC1	4	19	321456	1111602	15050304	U	736.0	234.0	736.0
	D-13-11 31CDD1	4	19	321456	1111540	15050304	U	705.0	270.0	705.0
	D-14-10 11AAA	4	19	321404	1111715	15050304	U	1010.0	400.0	1000.0
	D-14-10 12ABA	4	19	321256	1111629	15050304	Z	485.0	370.0	480.0
	D-14-11 04CAA	4	19	321425	1111340	15050304	I	581.0	0.	561.0
	D-14-11 06CCD	4	19	321403	1111354	15050304	I	635.0	280.0	635.0
	D-14-11 07BAD	4	19	321348	1111544	15050304	I	700.0	300.0	700.0
	D-14-11 08CCC	4	19	321310	1111500	15050304	I	590.0	300.0	580.0
	D-14-11 22CBB	4	19	321147	1111258	15050304	P	1240.0	400.0 600.0	600.0 1240.0
	D-14-11 34AAD	4	19	321021	1111205	15050304	P	512.0	285.0	510.0
	D-15-10 28CDC	4	19	320511	1111957	15050304	P	640.0	240.0	640.0
	D-15-10 33CAC	4	19	320435	1111950	15050304	H	206.0	-	-
	D-15-10 35AAA	4	19	320511	1111712	15050304	U	350.0	-	-
	D-15-11 05CCD	4	19	320850	1111459	15050304	H	712.0	240.0	697.0
	D-15-11 11ADD	4	19	320828	1111104	15050304		588.0	330.0	585.0
	D-15-11 11BBB	4	19	320847	1111156	15050304	P	1170.0	-	-
	D-15-11 15BBB2	4	19	320753	1111255	15050304	P	993.0	348.0 559.0 861.0 348.0	605.0 861.0 993.0 605.0
	D-15-11 22DDD	4	19	320617	1111202	15050304		[illegible]	-	-
BIC	B-17-02 04DBD	4	25	345302	1122831	15060201	U	157.0	-	-
	B-17-02 05CBA	4	25	345312	1123008	15060201	S	-	-	-
	B-17-02 06BBB	4	25	345338	1123118	15060201	I	342.0	-	-
	B-18-03 23BBC	4	25	345608	1123323	15060201	U	61.0	-	-
	B-19-03 19CBD	4	25	350059	1123731	15060201	I	500.0	65.0	-
	B-19-04 10ADA	4	25	350303	1123956	15060201	S	605.0	-	-
	B-24-08 17DCD1	4	25	352730	1130810	15060201		1790.0	100.0	-
BIS	B-16-13 36CCC	4	15	344040	1133510	15030201	H	15.0	-	-
	B-21-10 17CCD1	4	15	351153	1132143	15030201	U	500.0	400.0	500.0
	B-21-13 24BCD	4	15	351119	1133708	15030201	S	404.0	-	-
	B-22-08 15CCB	4	25	351712	1130654	15030201	U	-	-	-
BLM	04 56-2.85x14.19	4	17	361737	1101803	-	H	2670.0	-	-
BLM RES	01 058-05.09X05.82	4	5	362456	1105030	15020018	H	251.0	19.0	251.0
	02 040-00.85X12.17	4	17	363423	1103055	15020018	H	820.0	12.0 770.0	523.0 820.0
	02 040-04.03X14.68	4	17	363213	1103420	15020018	H	500.0	318.0 328.0	328.0 500.0
	02 040-05.38X15.27 BMOB	4	17	363143	1103550	15020018	U	400.0	250.0	400.0
	02 040-11.20X13.60	4	17	363309	1104205	14070006	H	300.0	260.0	300.0
	03 077-11.59X14.61	4	5	360217	1111226	15020018	H	450.0	75.0	450.0
	03 097-08.22X06.32	4	5	355428	1110846	15020016	H	358.0	-	-
	04 074-08.95X02.95 BMOB	4	17	361225	1102407	15020017		2460.0	1950.0	2510.0
	04 075-00.61X16.21 BMOB	4	17	360055	1103049	15020012	U	1680.0	1520.0	1680.0
	04 075-05.09X12.30	4	17	360418	1103527	15020017	P	1780.0	1480.0	1780.0
	06 094-03.23X11.05	4	17	355023	1101827	15020012	P	1110.0	906.0	1110.0
	06 095-06.50X08.61	4	17	355230	1103658	15020012	H	-	655.0 890.0	675.0 990.0
	08 037-06.23X02.51	4	1	364248	1095146	14080204	H	107.0	60.0	107.0
	08 037-12.81X16.98	4	1	363013	1095849	14080204	H	720.0	619.0	-
	08 038-04.43X15.39	4	17	363137	1100447	14080204	P	1600.0	1140.0	1570.0
	08 038-07.04X10.39	4	17	363558	1100737	14080204	H	1280.0	1130.0	1280.0
	08 038-09.40X07.08 BMOB	4	17	363850	1101008	14080204	U	1340.0	470.0	1340.0
	08 039-00.70X01.57 BMOB	4	17	364338	1101546	14080204	U	868.0	712.0	868.0
	08 039-02.11 X 02.94	4	17	364226	1101717	14080204	H	890.0	740.0	890.0
	08 039-08.31X05.09	4	17	364034	1102400	14080204	H	933.0	180.0	933.0
	08 039-11.83X08.69	4	17	363727	1102745	14080204	H	314.0	130.0	314.0
	08 054-06.82X02.39	4	1	362756	1095222	14080204		750.0	550.0	750.0
	08 054-10.96X00.63 BMOB	4	1	362936	1095641	14080204	U	851.0	300.0 730.0	360.0 780.0
	09 037-01.81X14.35	4	1	363232	1094656	14080204	H	300.0	154.0	300.0
	10 054-01.35X13.20	4	1	361832	1094627	14080204	H	670.0	465.0	670.0
	10 054-01.47X09.39	4	1	362149	1094633	14080204	H	360.0	267.0	360.0
	10 54-1.41X1.85	4	1	362823	1094631	14080204	H	360.0	-	-

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
BUT	B-07-14 16AAA	4	12	335725	1134258	15030105	S	381.0	-	-
	B-07-15 02DDC	4	12	335823	1134715	15030105	I	520.0	300.0	520.0
	B-07-15 09DDD	4	12	335728	1134906	15030105	U	106.0	-	-
	B-07-15 10ADA	4	12	335810	1134802	15030105	U	680.0	-	-
	B-07-15 11CAA	4	12	335748	1134732	-	U	600.0	300.0	580.0
	B-07-15 11DDD	4	12	335728	1134700	15030105	I	1000.0	175.0	405.0
	B-07-15 12AAD	4	12	335807	1134551	-	I	500.0	-	-
	B-07-15 12DAD	4	12	335744	1134552	15030105	I	673.0	150.0	605.0
	B-07-15 13DEC	4	12	335648	1134621	-	U	601.0	386.0 586.0	586.0 601.0
	B-07-15 15AAD3	4	12	335718	1134805	-	U	585.0	400.0	585.0
	B-08-13 04DDD1	4	12	340333	1133637	15030105	U	1000.0	-	-
	B-08-14 20DAB	4	12	340122	1134403	15030105	S	545.0	-	-
	B-08-14 23CDD	4	12	340059	1134116	15030105	U	500.0	450.0	500.0
	B-08-14 23DDD	4	12	340058	1134047	15030105	U	1000.0	450.0 500.0	500.0 1000.0
	B-08-14 25BDC	4	12	340031	1134030	15030105	I	1500.0	400.0 1150.0	1120.0 1500.0
	B-08-14 29CDD	4	12	340008	1134430	15030105	U	1170.0	365.0	1170.0
BWM	B-09-09 04CBC	4	25	340852	1131225	15030204	U	860.0	-	-
	B-10-14 14DBD	4	27	341222	1134059	15030204	I	100.0	60.0	100.0
	B-10-14 23BAC	4	27	341153	1134123	15030204	I	-	-	-
	B-11-04 18CCC	4	25	341714	1124318	15030203	I	325.0	75.0	-
	B-11-06 19CBD	4	25	341648	1125552	15030203	I	312.0	-	-
	B-11-08 20ADB	4	25	341707	1130652	15030203	S	175.0	75.0	175.0
	B-11-10 31CBA	4	27	341508	1132036	15030203	U	3000 0	84.0 986.0 2510.0	986.0 2510.0 3000.0
	B-11-11 17ACA2	4	27	341756	1132517	15030203	H	16.0	-	-
	B-11-11 31BBB1	4	27	341531	1132658	15030203	U	888.0	268.0	888.0
	B-12-03 06CDD	4	25	342422	1123641	15030203		461.0	-	-
	B-12-05 02ACD2	4	25	342442	1124444	15030203	I	200.0	-	-
	B-12-06W31AAD	4	25	342044	1125541	15030203	I	147.0	-	-
	B-13-04 21DB U PZ2	4	13	342709	1124045	15030203	U	457.0	412.0 446.0	446.0 457.0
	B-13-04 21DBU-PZ1	4	13	342709	1124045	15030203	U	395.0	208.0	395.0
	B-13-04 26BCC1 UNSRV	4	[illegible]	342626	1123914	15030203	U	1670.0	520.0	-
	B-13-04 27AB U PZ1	4	[illegible]	342639	1123942	15030203	Z	-	-	-
	B-13-04 27AB U PZ2	4	25	342639	1123942	15030203	Z	-	-	-
	B-13-06 09DCD	4	25	342678	1125318	15030203	I	52.0	-	-
	B-13-13 07DDB1	4	15	342835	1133913	15030201	H	226.0	60.0	425.0
	B-13-13 07DDB2	4	15	342836	1133913	15030201	H	543.0	-	-
	B-13-15 17CAC2	4	15	342753	1135118	15030204	U	1020.0	-	-
	B-14-04 22BAD	4	25	344248	1124008	15060201	S	302.0	120.0	-
CDI	A-18-14 13ABD3	4	5	345750	1104828	15020008	U	293.0	-	-
	A-18-15 28AAD	4	5	345603	1104503	15020008	U	500.0	200.0	500.0
	A-19-16 06CDB	4	17	350417	1104133	15020008	S	195.0	143.0	195.0
CBI	B-04-18 33CCA	4	27	333828	1141348	15030106	H	-	-	-
	B-18-21 05AAD	4	15	345849	1143140	15030101	H	510.0	-	-
	B-18-21 05ACC	4	15	345832	1143201	15030101	U	-	-	-
	B-20-22 24DDD	4	15	350557	1143345	15030101	P	515.0	-	-
	B-21-21 21CBB	4	15	351122	1143201	15030101	H	490.0	108.0	490.0
	B-25-20 15AAA	4	15	353337	1142352	15010014	S	700.0	-	-
	B-26-20 06ABC	4	15	354027	1142731	-	U	-	-	-
	B-28-21 20AAC	4	15	354838	1143232	15010014	S	-	-	-
	B-30-20 06CA UNSURV	4	15	360105	1142811	15010014	U	590.0	-	-
	C-05-20 24ADD	4	27	325751	1141708	15030104	H	832.0	-	-
	C-06-20 32ABD2	4	27	325157	1142007	15070201	H	502.0	462.0	-
CHN RES	09 036-13.75X16.01	4	1	363103	1094452	14080204	H	300.0	145.0	300.0
	10 071-05.55X01.98	4	1	361317	1093558	14080204	U	200.0	80.0	200.0
CHV	A-15-12 15DDC	4	5	344058	1110331	15020008	S	780.0	-	-
	A-17-14 17ADD	4	5	345223	1105223	15020008	S	600.0	-	-
CON	A-11-24 22DBC	4	1	342006	1094708	15020005	U	850.0	-	-
	A-11-25 18DCC	4	1	342044	1094400	15020002	U	280.0	-	-
	A-12-26 02BDA	4	1	342817	1093336	15020002	S	100.0	80.0	100.0
	A-12-26 13DCD	4	1	342555	1093216	15020002	U	300.0	-	-
	A-13-26 06DCB	4	1	343302	1093720	15020002	U	447.0	74.0	-
	A-13-26 12DDA	4	1	343226	1093131	15020002	S	75.0	-	-
	A-14-24 29DCC	4	1	343432	1095004	15020002	S	335.0	-	-
	A-14-25 14CCD	4	1	343623	1094032	15020002	S	350.0	-	-
	A-14-26 21BCC	4	1	343601	1093558	15020002	I	345.0	103.0	-
	A-14-26W18DBC	4	1	343637	1093749	15020002	U	410.0	-	-

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
DOU	D-18-26 11ADA	4	3	315309	1093943	15050201	U	-	-	-
	D-18-26 16BBB	4	3	315231	1094239	15080301	S	-	-	-
	D-18-26 28AAA2	4	3	315042	1094143	15080301	H	390.0	131.0	331.0
	D-18-27 08BAC	4	3	315318	1093721	-	H	360.0	348.0	360.0
	D-19-26 09BBB	4	3	314806	1094233	15080301	U	515.0	158.0	512.0
	D-19-26 23DAA	4	3	314557	1093924	15040006	U	400.0	190.0	400.0
	D-19-26 29BAB2	4	3	314528	1094303	15080301	U	206.0	31.0	160.0
									160.0	206.0
	D-19-26 33CDA	4	3	314358	1094148	15080301	U	252.0	40.0	229.0
	D-20-25 09CAA1	4	3	314225	1094754	15080301	S	700.0	-	-
	D-20-26 23DAA	4	3	314039	1093915	15040006	U	150.0	82.0	-
	D-20-26 25CBC	4	3	313941	1093906	-	H	300.0	-	-
	D-21-25 15DBB	4	3	313611	1094720	15080301	S	450.0	-	-
	D-21-26 02BAA	4	3	313826	1094023	15080301	U	124.0	50.0	100.0
	D-21-26 02CCD	4	3	313740	1094038	15080301	I	387.0	85.0	387.0
	D-21-26 22AAD	4	3	313545	1094052	15080301	I	511.0	280.0	501.0
	D-21-26 24BAA	4	3	313550	1093920	15040006	I	630.0	-	-
	D-21-26 32DAD	4	3	313332	1094300	15080301	I	400.0	130.0	175.0
									20.0	323.0
									324.0	400.0
	D-21-26 36DDD	4	3	313318	1093851	15080301	U	-	-	-
	D-22-25 14ACD	4	3	313107	1094616	15080301	S	-	-	-
	D-22-26 02AAA	4	3	313310	1093955	15080301	U	617.0	170.0	617.0
	D-22-26 04DAD	4	3	313242	1094155	15080301	I	450.0	-	-
	D-22-26 29BCC	4	3	312923	1094349	15080301	H	-	-	-
	D-22-26 31CCD	4	3	312803	1094445	15080301	H	250.0	-	-
	D-23-26 13CCC1	4	3	312527	1093957	15080301	U	-	-	-
	D-23-27 09DAB	4	3	312638	1093559	15080301	I	500.0	116.0	496.0
	D-23-27 19CBB	4	3	312458	1093842	15080301	I	302.0	68.0	302.0
	D-23-27 22DDD	4	3	312433	1093449	15080301	H	350.0	-	-
	D-23-28 08DDD	4	3	312615	1093042	15080301	S	-	-	-
	D-23-28 31CCC	4	3	312248	1093238	15080301	S	-	-	-
	D-24-27 05BDB	4	3	312226	1093728	15080301	I	330.0	-	-
DUN	18S 20W 15 433A	35	23	324406	1085342	-	S	140.0	-	-
	18S 21W 32 432	35	23	324137	1090146	-	I	-	-	-
	19S 20W 18 131	35	23	323930	1085720	-	I	81.0	-	-
	19S 20W 18 323	35	23	323906	1085700	-	S	85.0	-	-
	19S 21W 03 412	35	23	324051	1085941	-	I	-	-	-
	20S 21W 01 131	35	23	323555	1085816	-	S	356.0	-	-
	20S 21W 17 111	35	23	323425	1090221	-	S	171.0	-	-
	D-07-31 04BCC	4	11	325114	1091058	15040002	I	75.0	-	-
	D-08-32 17DC	4	11	324355	1090518	15040002	H	71.0	-	-
	D-08-32 34ADD	4	11	324139	1090250	0	I	83.0	-	-
GIL	C-02-04 26BDA	4	13	331337	1123834	15070101	I	600.0	250.0	-
									440.0	600.0
	C-02-04 32ADA	4	13	331248	1124108	15070101		450.0	160.0	430.0
	C-02-05 26CBA	4	13	331333	1124430	15070101	I	1000.0	250.0	900.0
									900.0	1000.0
	C-03-04 06BBA	4	13	331210	1124257	15070101	I	545.0	100.0	486.0
									500.0	545.0
	C-03-04 09BAA	4	13	331119	1124033	15070101	I	490.0	135.0	490.0
	C-03-04 10CAA2	4	13	331053	1123929	15070101		500.0	0.	200.0
									394.0	500.0
	C-03-04 17ADD	4	13	331008	1124108	15070101	U	302.0	115.0	288.0
	C-03-04 19CCD	4	13	330847	1124255	15070101	I	1110.0	197.0	624.0
									634.0	1110.0
	C-03-04 23BAA	4	13	330932	1123828	15070101		372.0	141.0	339.0
									339.0	360.0
	C-03-04 27BAA	4	13	330841	1123927	15070101	I	397.0	-	-
	C-03-04 33ADC	4	13	330727	1124010	15070101	I	800.0	100.0	780.0
	C-03-05 02CBB	4	13	331143	1124508	15070101	I	320.0	60.0	245.0
									274.0	320.0
	C-04-04 08CCA	4	13	330522	1124153	15070101	I	700.0	250.0	700.0
	C-04-04 09BAA1	4	13	330604	1124031	15070101	U	300.0	-	-
	C-04-04 16DAD	4	13	330434	1123959	15070101	I	707.0	-	-
	C-04-04 27DAA	4	13	330258	1123859	15070101	I	880.0	118.0	880.0
	C-04-04 33ADD	4	13	330214	1123855	15070101	I	910.0	390.0	910.0
	C-04-06 25BAC	4	13	330314	1124958	15070101	S	-	-	-
	C-04-06 36ADC2	4	13	330214	1124928	15070101	I	960.0	-	-
	C-04-07 34CDC	4	13	330143	1125822	15070101	I	830.0	200.0	830.0
	C-05-03 07ABA2	4	13	330047	1123614	15070101	S	-	-	-
	C-05-03 29AAA	4	13	325813	1123453	15070101		1990.0	500.0	1870.0
	C-05-03 29CBC2	4	13	325742	1123546	15070101	S	-	-	-
	C-05-04 10CBC	4	13	330020	1123949	15070101	I	1130.0	110.0	1130.0
	C-05-04 18ADD	4	13	325937	1124203	15070101	I	501.0	130.0	482.0
	C-05-04 21CBD	4	13	325830	1124045	15070101	I	1010.0	80.0	498.0
									498.0	1000.0
									1000.0	1010.0
	C-05-04 31ADD	4	13	325700	1124159	15070101	I	1220.0	80.0	505.0
									505.0	1100.0
									1100.0	1220.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
GIL-- Cont.	C-05-05 16CDC	4	13	325908	1124647	15070101	I	491.0	250.0	416.0
	C-05-05 19AAB	4	13	325901	1124830	15070101	I	1130.0	220.0 494.0 1030.0	494.0 1030.0 1130.0
	C-05-05 20DCD	4	13	325816	1124731	15070101		767.0	480.0	680.0
	C-05-06 02BBC	4	13	330132	1125116	15070101	I	600.0	200.0 580.0	580.0 600.0
	C-05-06 11CAA	4	13	330023	1125052	15070101	I	400.0	150.0	400.0
	C-05-06 17DAD	4	13	325920	1125332	15070101		1500.0	1000.0 1400.0	1400.0 1500.0
	C-05-06 31CBB	4	13	325650	1125527	15070101	I	1870.0	906.0 1770.0	1770.0 1780.0
	C-06-04 12CDD	4	13	325450	1123715	15070101	S	-	-	-
	C-06-05 02DDD	4	13	325543	1124402	15070101	I	1130.0	212.0 1120.0	1120.0 1130.0
	C-06-05 04CBA	4	13	325603	1124648	15070101	I	1850.0	176.0 1530.0 1850.0	1530.0 1850.0 1850.0
	C-06-07 11CCC	4	13	325444	1125719	15070101	I	850.0	490.0	850.0
	C-07-06 04DDD	4	13	325027	1125220	15070101	I	886.0	642.0 698.0 749.0 778.0 802.0	676.0 708.0 752.0 795.0 810.0
	C-07-06 08CDD1	4	13	324934	1125352	15070101	U	785.0	600.0	780.0
	C-07-06 09CCC	4	7	324936	1125314	15070101	I	960.0	400.0 690.0	700.0 960.0
GRD	C-04-08 26DDD	4	13	330228	1130244	15070201	I	192.0	46.0	-
	C-04-08 35BDD	4	13	330203	1130321	15070201	I	272.0	80.0 266.0	256.0 272.0
	C-04-10 02CBB	4	13	330632	1131614	15070201		990.0	720.0 961.0	961.0 990.0
	C-04-10 22ABB	4	13	330422	1131643	15070201	I	500.0	140.0	-
	C-04-11 15BAB	4	27	330514	1132310	15070201	I	510.0	166.0 425.0	366.0 455.0
	C-04-11 21BBB	4	27	330424	1132430	15070201	I	1300.0	270.0 355.0 450.0 475.0 545.0 1160.0	285.0 385.0 462.0 481.0 557.0 1290.0
	C-05-11 03BBB	4	27	330145	1132327	15070201	U	-	-	-
	C-06-12 19BBA	4	27	325353	1133211	15070201	U	1350.0	-	-
	C-07-11 27DDD	4	27	324658	1132208	15070202	I	678.0	265.0	-
	C-07-12 23CDD	4	27	324750	1132750	15070202	U	-	-	-
GSK	D-01-18 13BBA	4	7	332108	1102745	15040007	U	-	-	-
	D-03-15 29ABA	4	7	330858	1104951	15050100	U	300.0	-	-
	D-04-14 21BCD	4	21	330416	1105533	15050100	S	80.0	-	-
GSK RES	D-01-18 14AAD	4	7	332103	1102804	15040007	I	-	-	-
	D-01-18 24DDD	4	7	331934	1102658	15040007	U	-	-	-
GTD	C-06-14 28BBA	4	27	325300	1134252	15070201	I	1040.0	524.0	1040.0
	C-07-16 24ADD	4	27	324824	1135102	15070201		-	70.0	80.0
	C-07-16 27CCC	4	27	324653	1135403	15070201		28.0	-	-
	C-07-16 33DAA	4	27	324623	1135409	15070201		-	-	-
	C-08-17 12DDD	4	27	324415	1135711	15070201	I	-	-	-
	C-08-17 20DCC	4	27	324229	1140146	15070201		-	-	-
	C-08-18 27AAD	4	27	324217	1140525	15070201	U	-	-	-
	C-09-19 04CDD	4	27	323955	1141306	15070201	U	110.0	-	-
	C-16-07 27BAD UNSURV	4	19	320115	1125730	15080102	S	37.0	-	-
HAR	B-01-08 06AAA	4	13	332749	1130639	15070103	I	759.0	-	-
	B-01-08 19CBC	4	13	332440	1130736	15070104	I	1000.0	447.0	1000.0
	B-01-09 10BBB	4	13	332658	1131040	15070104	U	1780.0	1210.0	-
	B-01-09 20BDC	4	13	332449	1131230	15070104	I	1500.0	744.0 1430.0	1430.0 1500.0
	B-01-09 26CCC	4	13	332335	1130939	15070104	I	1000.0	-	-
	B-01-10 01CCC	4	13	332704	1131450	15070104	I	918.0	340.0	-
	B-02-08 17CAA	4	13	333057	1130607	15070104	I	1650.0	250.0	-
	B-02-08 27BBA	4	13	332937	1130416	15070104	I	1540.0	320.0	-
	B-02-09 03BBB	4	13	333305	1131043	15070104	I	-	-	-
	B-02-09 07ABB	4	13	333212	1131318	15070104	U	1690.0	400.0	-
	B-02-09 14BAB	4	13	333120	1130925	15070104	I	1300.0	490.0 1220.0	1220.0 1300.0
	B-02-10 05ABB	4	13	333301	1131826	15070104	I	-	-	-
	B-02-10 17DCA	4	13	333035	1131817	15070104	H	-	-	-
	B-02-10 26DBB	4	13	332908	1131520	-	U	755.0	-	-
	B-03-11 08CAC	4	13	333651	1132459	15070104	H	554.0	420.0	-
	B-03-11 34BBB	4	27	333356	1132310	15070104	I	850.0	450.0 560.0	560.0 850.0
	B-04-09 30AAC	4	13	333952	1131303	15070104	S	-	-	-
	B-04-12 04CCA	4	12	334248	1133013	15070104		-	-	-
	C-01-08 04BDA	4	13	332216	1130505	15070104	U	-	-	-
	C-01-08 06DCC	4	13	332149	1130703	15070103	I	710.0	-	-
	C-01-08 14DDD	4	13	332005	1130228	15070104		551.0	-	-
	C-01-08 16DCC	4	13	332005	1130457	15070104	I	585.0	70.0	-
	C-01-09 11DCB	4	13	332103	1130904	15070104	I	-	250.0	-
	C-01-09 18ACB	4	13	332040	1131314	15070104	U	893.0	0.	-

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
HAS	B-04-04 19BAA	4	13	334052	1124219	15070103	U	-	-	-
	B-04-05 05ABB	4	13	334325	1124720	15070103	S	712.0	400.0	-
	B-05-04 24CCD	4	13	334513	1123805	15070102	S	800.0	400.0	-
	B-05-05 22BCC	4	13	334543	1124630	15070103	S	580.0	-	-
	B-06-04 02CCC	4	13	335303	1123916	15070103	P	1000.0	-	-
	B-06-04 03ABA	4	13	335351	1123837	15070103	H	150.0	-	-
	B-06-04 03BAC2	4	13	335343	1123956	15070103	H	100.0	70.0	100.0
	B-06-04 05CCC	4	13	335303	1124224	15070103	S	24.0	4.0	24.0
	B-06-04 10ADA	4	13	335245	1123923	15070103	H	300.0	250.0	300.0
	B-06-04 10DAB	4	13	335333	1123927	15070103		-	-	-
	B-06-04 13AAB	4	13	335142	1123722	15070103	H	-	-	-
	B-06-04 13DCD	4	13	335120	1123729	15070103	P	645.0	545.0	645.0
	B-06-04 14AAC	4	13	335202	1123823	15070103	H	645.0	-	-
	B-06-04 26BCD	4	13	335003	1123907	15070103	H	250.0	-	-
	B-06-04 26DBC	4	13	334950	1123843	15070103	H	400.0	360.0	400.0
	B-06-08 20ADC	4	13	335124	1130637	15070102	U	-	-	-
	B-07-04 07BCC	4	13	335154	1124303	15070103	I	350.0	-	-
	B-07-05 03BCC2	4	13	335853	1124615	15070103	P	500.0	147.0	447.0
	B-08-05 10DAA	4	25	340258	1124520	15070103		605.0	-	-
	B-08-05 18CCC	4	25	340147	1124823	15070103	H	450.0	-	-
	B-08-05 19CBC	4	25	340112	1124821	15070103	I	350.0	-	-
	B-09-05 35DBB	4	25	340440	1124436	15070103	S	880.0	-	-
	B-09-06 05ADD	4	25	340908	1125338	15070103		992.0	-	-
HOL	A-15-23 24CCA	4	17	344045	1095154	15020002	I	639.0	335.0	639.0
	A-15-23 27DDD	4	17	343950	1095320	15020002	I	600.0	-	-
	A-15-23 28DCC	4	17	343950	1095440	15020002	I	425.0	-	-
	A-16-19 36CBC	4	17	344407	1101718	15020008	U	800.0	-	-
	A-16-22 17CCD	4	17	344644	1100242	15020002	I	450.0	-	-
	A-17-20 10DBA	4	17	345324	1101242	15020008	U	-	-	-
	A-17-20 26DBC	4	17	345023	1101114	15020008	U	570.0	310.0	-
	A-17-21 10CBA	4	17	345310	1100625	15020002	U	285.0	-	-
	A-18-19 17ADC	4	17	345736	1102042	15020008	I	500.0	300.0	-
	A-18-19 23DBD	4	17	345635	1101738	15020008	U	550.0	200.0	-
HOP	A-19-16 36DBB	4	17	350002	1103555	15020011	U	610.0	72.0	610.0
HOP RES	07 093-06.25X03.85	4	17	355638	1100640	15020013	P	1340.0	1180.0	1260.0
HOU	A-41-08 23DAC	4	5	365611	1112943	14070006	U	910.0	755.0	910.0
	A-42-08 36CBC	4	5	365942	1112925	14070006		-	77.0	655.0
HUA	B-22-16 03CBB	4	15	351907	1135828	15010007	H	970.0	600.0	-
	B-22-16 27DDD	4	15	351514	1135728	15010007	P	970.0	-	-
	B-23-13 32ACA	4	15	352020	1134115	15010007	U	472.0	230.0	-
	B-24-12 17CBC	4	15	352747	1133538	15010007	U	440.0	-	-
	B-24-14 28CAD	4	15	352559	1134620	15010007	U	705.0	524.0	-
	B-24-16 01DDD1	4	15	352911	1135521	15020016	I	700.0	-	-
	B-26-18 03AAA1	4	15	354036	1141106	15010007	H	705.0	570.0	597.0
	B-28-17 31CCC	4	15	354552	1140850	15010007	U	800.0	-	-
	B-30-17 14DCC	4	15	355855	1140435	15010005	U	650.0	-	-
KAN	B-40-04 06AAC	4	15	365403	1124528	15010003	I	202.0	102.0	202.0
LHA	B-01-05 08DAB	4	13	332634	1124700	15070103	U	304.0	-	-
	B-01-05 15CBB1	4	13	332541	1124545	15070103	U	140.0	-	-
	B-01-05 27BBC	4	13	332416	1124543	15070103	I	384.0	0.	-
	B-01-06 01ABB	4	13	332752	1124923	15070101	U	1220.0	200.0	-
	B-01-06 03BBC	4	13	332744	1125154	15070104	H	400.0	240.0 200.0	400.0 240.0
	B-01-06 11BCA	4	13	332648	1125044	15070101	I	-	-	-
	B-01-06 23DCD	4	13	332427	1125013	15070101	H	460.0	205.0	-
	B-02-04 29DCD	4	13	332848	1124057	15070103	S	-	-	-
	B-02-05 29DAC	4	13	332858	1124707	15070103	U	270.0	150.0	210.0
	B-02-06 05DAA	4	13	333240	1125305	15070104	I	890.0	400.0 858.0	858.0 890.0
	B-02-06 09CBB	4	13	333147	1125303	15070104	I	1200.0	343.0	779.0
	B-02-06 21BBA	4	13	333028	1125251	15070103	U	1030.0	-	-
	B-02-06 33CAA	4	13	332817	1125234	15070104	U	1210.0	280.0 500.0	500.0 1210.0
	B-02-07 05BBC	4	13	333256	1130014	15070104	S	-	63.0	427.0
	B-02-07 23CCA	4	13	332950	1125657	15070104	U	390.0	336.0	390.0
	B-02-07 27AAB	4	13	332934	1125728	15070104	U	350.0	154.0 300.0	290.0 350.0
	B-03-06 30BAD	4	13	333442	1125440	15070104	S	720.0	-	-
	C-01-05 03BAA1	4	13	332236	1124520	15070103	U	170.0	70.0	-
	C-01-05 29ADC	4	13	331844	1124702	15070101	I	650.0	350.0	650.0
	C-01-05 34ADC1	4	13	331751	1124457	15070101	U	443.0	250.0	-
	C-01-06 14DBB	4	13	332026	1125026	15070104	I	1110.0	190.0 390.0 1060.0	390.0 1060.0 1110.0
	C-01-06 18BBB	4	13	332053	1125505	15070104	I	1330.0	-	-
	C-01-06 19ABB	4	13	332000	1125438	15070103	I	1040.0	180.0	-
	C-01-07 14BBB	4	13	332053	1125708	15070104	U	500.0	300.0 150.0	- 500.0
	C-02-05 08CCC	4	13	331547	1124748	15070104	I	700.0	340.0	700.0
	C-02-05 16DAA	4	13	331518	1124548	15070101	I	590.0	-	-

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
LIC	B-14-02 14BAD	4	25	343549	1122618	15060202	U	110.0	-	-
	B-15-01 01CDC	4	25	344212	1121907	15060202	S	475.0	-	-
	B-15-01 25CDB	4	25	343847	1121904	15060202	U	355.0	-	-
	B-15-02 17ABA	4	25	344106	1122915	15060202	S	430.0	-	-
	B-16-02 03BAC	4	25	344805	1122732	15060201	I	516.0	-	-
	B-16-02 03BBB1	4	25	344809	1122752	15060202	H	516.0	-	-
	B-16-02 03DDC4	4	25	344723	1122657	15060202	H	120.0	-	-
	B-16-02 11CBB1	4	25	344653	1122649	15060202	H	125.0	-	-
	B-16-02 17BDC	4	25	344607	1122943	15060202	H	270.0	20.0	270.0
	B-16-02 21BAA1	4	25	344534	1122829	15060202	U	413.0	201.0	413.0
	B-16-02 34ABA2	4	25	344347	1122710	-	H	350.0	20.0	350.0
	B-17-02 35CCC2	4	25	344817	1122648	15060202	I	740.0	-	-
	B-17-02N34ACC	4	25	344844	1122723	15060202	U	420.0	-	-
	B-17-02N34DDD1	4	25	344819	1122657	15060201	U	722.0	263.0	722.0
	B-17-02S34ABA	4	25	344818	1122706	15060202	I	722.0	-	-
	B-17-02W27DCC	4	25	344911	1122724	15060202	I	750.0	-	-
LSC	D-03-02 23DAA	4	21	330314	1120658	15050303	U	780.0	-	-
	D-03-02 23DCA	4	21	330903	1120712	15050303		780.0	-	-
	D-03-05 01DDA	4	21	331137	1114720	15050100	I	-	-	-
	D-03-05 29BCB	4	21	330828	1115228	15050100	I	174.0	36.0	156.0
	D-03-06 17BDD	4	21	331007	1114547	15050100	I	1140.0	346.0	504.0
									504.0	1100.0
									1100.0	1140.0
	D-04-02 15CBC	4	21	330435	1120858	15050303	H	372.0	125.0	365.0
	D-04-02 23ACC	4	21	330355	1120730	15050303	I	800.0	-	-
	D-04-03 13DDD	4	21	330424	1115946	15050303	I	363.0	65.0	350.0
	D-04-03 15DCC	4	21	330423	1120214	15050303	U	340.0	60.0	324.0
	D-04-03 16CBB	4	21	330442	1120357	15050303	I	600.0	-	-
	D-04-03 20DCD	4	21	330328	1120408	15050303	I	300.0	-	-
									1360.0	1920.0
	D-04-03 35DDD	4	21	330144	1120047	15050100	I	385.0	70.0	370.0
	D-04-04 16CDD	4	21	330425	1115709	15050303	I	600.0	65.0	586.0
	D-04-04 20CDD	4	21	330330	1115812	15050303	I	680.0	180.0	675.0
									675.0	680.0
	D-04-04 22DDD1	4	21	330331	1115537	15050303	U	415.0	109.0	415.0
	D-04-04 31DDD	4	21	330147	1115844	15050303	I	606.0	200.0	600.0
	D-04-09 33AAD	4	21	330236	1112518	15050100	I	997.0	80.0	997.0
									252.0	295.0
									295.0	378.0
									378.0	474.0
									474.0	598.0
									598.0	997.0
	D-04-10 30BDD	4	21	330311	1112142	15050100	I	300.0	-	-
	D-04-11 07DBB	4	21	330541	1111528	15050100	I	-	-	-
	D-05-02 02DCD	4	21	330052	1120716	15050303	I	950.0	450.0	740.0
									740.0	940.0
	D-05-02 22DAD	4	21	325830	1120804	15050303	U	800.0	388.0	800.0
	D-05-02 36BAD	4	21	325714	1120633	-	I	1060.0	398.0	778.0
									778.0	1050.0
									1050.0	1060.0
	D-05-03 03CCC	4	21	330053	1120248	15050303	I	455.0	150.0	430.0
	D-05-03 12CDD1	4	21	325959	1120017	15050303	H	600.0	110.0	365.0
									380.0	580.0
	D-05-03 25ADD	4	21	325743	1115945	15050303	I	550.0	115.0	535.0
	D-05-03 29BCC1	4	21	325745	1120454	15050303	U	590.0	300.0	590.0
	D-05-03 33DCB2	4	21	325633	1120322	15050303	I	1230.0	810.0	1200.0
									1210.0	1230.0
	D-05-04 15ADD	4	21	325930	1115542	15050303	I	592.0	160.0	-
									175.0	285.0
									400.0	500.0
									160.0	570.0
									573.0	592.0
	D-05-04 19DD UNSRV	4	21	325802	1115853	-	I	-	-	-
	D-05-04 23BDD2	4	21	325840	1115516	15050303	I	1100.0	-	-
	D-05-04 28BCD2	4	21	325735	1115732	15050303	I	-	-	-
	D-05-05 32CAB	4	21	325639	1115221	15050303	U	500.0	150.0	-
	D-05-06 28CAA	4	21	325735	1114452	15050303	U	-	-	-
	D-05-07 26CDD	4	21	325711	1113638	15050100	I	1510.0	0.	290.0
									270.0	300.0
									300.0	590.0
									495.0	1500.0
									1500.0	1510.0
									1.0	290.0
									495.0	1500.0
									1500.0	1510.0
	D-05-07 28DCC2	4	21	325712	1113830	15050100		389.0	200.0	-
	D-05-07 33DDD	4	21	325618	1113808	15050100	I	268.0	-	-
	D-05-07 34DDD	4	21	325618	1113705	15050100	I	500.0	92.0	200.0
									210.0	500.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
LSC-	D-05-07W13DAC	4	21	325908	1113530	15050303	U	-	95.0	546.0
Cont.	D-05-08 02AAA	4	21	330146	1112923	15050100	I	230.0	30.0	56.0
									91.0	108.0
									187.0	190.0
									192.0	196.0
	D-05-08 12AAD	4	21	330047	1112822	15050100	I	-	38.0	152.0
									164.0	220.0
	D-05-08 31DDD	4	21	325640	1113334	15050100	U	241.0	126.0	-
	D-05-09 03DAB	4	21	330120	1112425	15050100	I	450.0	-	-
	D-05-09 18BDD1	4	21	325945	1112751	15050100	I	396.0	80.0	382.0
	D-05-09 22CBA	4	21	325848	1112511	15050100	I	432.0	155.0	420.0
	D-05-09 29ADA	4	21	325807	1112616	15050100	H	616.0	134.0	266.0
									336.0	342.0
									352.0	355.0
									378.0	384.0
									412.0	420.0
									432.0	440.0
	D-05-09 31ADD	4	21	325707	1112718	15050100	I	556.0	155.0	442.0
	D-05-02E01CDD2	4	21	325542	1120533	-	U	-	-	-
	D-06-03 11CDD1	4	21	325430	1120022	15050303	U	600.0	70.0	-
	D-06-03 15BDC	4	21	325404	1120130	15050303	I	1280.0	400.0	708.0
									677.0	1270.0
	D-06-03 27CCC	4	21	325156	1120151	15050306		1250.0	550.0	1110.0
									1110.0	1250.0
	D-06-03S02DDD2	4	21	325524	1115949	15050303	H	1130.0	285.0	1110.0
	D-06-04 02CDD	4	21	325523	1115411	15050303	I	950.0	450.0	935.0
	D-06-04 07CCC	4	21	325434	1115846	15050303	U	514.0	103.0	270.0
									318.0	508.0
	D-06-04 36DDD	4	21	325102	1115237	15050303	U	1240.0	106.0	630.0
	D-06-04S04DDD3	4	21	325523	1115544	-	P	755.0	-	-
	D-06-04S06DDD	4	21	325525	1115747	15050303	I	1210.0	200.0	725.0
									740.0	1210.0
	D-06-05 09ADD	4	21	325502	1114936	15050303	U	166.0	-	-
	D-06-05 16DAD1	4	21	325353	1114933	15050303	I	240.0	-	-
	D-06-05 19DDA PZ1	4	21	325256	1115140	15050303	U	1780.0	1160.0	1170.0
	D-06-05 19DDA PZ2	4	21	325256	1115140	-	U	940.0	535.0	539.0
	D-06-05 25BBB	4	21	325245	1114726	15050303	I	100.0	30.0	86.0
	D-06-05 34BDD	4	21	325127	1114903	15050303	U	-	-	-
	D-06-06 07AAA3	4	21	325519	1114524	15050303	I	620.0	155.0	610.0
	D-06-06 09DAD	4	21	325448	1114322	15050303	I	600.0	280.0	600.0
	D-06-06 12BDB	4	21	325509	1114055	15050303	I	640.0	90.0	195.0
									205.0	500.0
									507.0	640.0
	D-06-06 14DDD2	4	21	325340	1114118	-	I	1210.0	450.0	750.0
									750.0	1210.0
	D-06-06 16ADD	4	21	325409	1114320	15050303	I	1130.0	690.0	1010.0
									1010.0	1130.0
	D-06-06 16CDD	4	21	325339	1114353	-	U	610.0	60.0	376.0
									290.0	545.0
									545.0	684.0
	D-06-06 23ADC	4	21	325316	1114127	15050100	I	1000.0	512.0	1000.0
	D-06-07 11DDD2	4	21	325432	1113504	15050100	U	406.0	150.0	315.0
	D-06-07 34BBC	4	21	325142	1113705	15050303	I	500.0	225.0	495.0
	D-06-07 35DDD	4	21	325102	1113504	15050100	I	2600.0	60.0	350.0
	D-06-08 11ADA1	4	21	325503	1112848	15050100	U	365.0	110.0	360.0
	D-06-08 14CCC	4	21	325338	1112947	15050100	I	450.0	55.0	440.0
	D-06-08 27BDD2	4	21	325220	1113022	-	I	554.0	214.0	554.0
	D-06-08 31CDD	4	21	325102	1113329	15050100	I	830.0	130.0	394.0
									402.0	406.0
	D-06-08S02DAD	4	21	325536	1112848	15050100	I	700.0	119.0	688.0
	D-06-08S04ADD1	4	21	325549	1113052	15050100		600.0	73.0	208.0
									220.0	596.0
	D-06-09 19BBD	4	21	325328	1112735	15050100	U	500.0	-	-
	D-06-09N04DDD	4	21	325617	1112448	15050100	H	600.0	200.0	580.0
	D-06-09N06DAA	4	21	325634	1112648	15050100	I	608.0	128.0	608.0
	D-07-03 21DBC	4	21	324804	1120321	-	S	-	-	-
	D-07-04 23DDD	4	21	324748	1115441	15050306	U	500.0	125.0	480.0
	D-07-05 01ADA	4	21	325047	1114625	-	U	-	-	-
	D-07-05 07DDD	4	21	324915	1115139	15050303	I	857.0	168.0	607.0
									607.0	857.0
	D-07-06 04DCC	4	21	325012	1114348	-	U	-	-	-
	D-07-06 17DDD2	4	21	324825	1114423	15050303	U	155.0	50.0	100.0
									100.0	155.0
	D-07-06 26DDD	4	21	324640	1114116	15050303	U	400.0	200.0	-
									535.0	823.0
									100.0	382.0
	D-07-07 02ACC	4	21	325037	1113533	15050100	U	-	-	-
	D-07-07 08BAA	4	21	325005	1113842	15050303	H	567.0	205.0	565.0
	D-07-07 11CDD	4	21	324917	1113541	15050303	U	450.0	100.0	430.0
	D-07-07 24DDD	4	21	324732	1113403	15050100	I	476.0	120.0	344.0
	D-07-07 34CDD2	4	21	324548	1113639	15050303	U	900.0	130.0	886.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
LSC- Cont.	D-07-08 05DCC	4	21	325011	1113225	15050100	I	408.0	120.0	395.0
	D-07-08 09DDD	4	21	324917	1113054	15050100	U	500.0	100.0	485.0
	D-07-08 17CDD	4	21	324827	1113227	15050100	U	564.0	150.0	557.0
	D-07-08 30CDD	4	21	324641	1113331	15050100	I	601.0	-	-
	D-07-08 31BBA	4	21	324637	1113346	15050100	U	828.0	560.0	580.0
	D-07-13 15DAA1	4	21	324919	1105857	15050100	S	125.0	-	-
	D-08-06 14CDD	4	21	324311	1114149	15050303	U	800.0	318.0	400.0
									400.0	760.0
									340.0	795.0
	D-08-06 22DDD2	4	21	324216	1114219	-	U	1050.0	-	-
	D-08-06 35DDD2	4	21	324032	1114118	15050303	U	770.0	-	-
	D-08-07 09ADD1	4	21	324430	1113712	15050303	U	418.0	110.0	418.0
	D-08-07 14DDA	4	21	324322	1113505	15050303	U	1110.0	644.0	1070.0
	D-08-07 19DDD	4	21	324218	1113916	15050303	U	800.0	-	-
	D-08-08 01DDD	4	21	324458	1112747	15050100	I	1190.0	220.0	666.0
									680.0	1180.0
									1180.0	1190.0
	D-08-08 07DDD1	4	21	324405	1113301	15050303	U	450.0	-	-
	D-08-08 07DDD2	4	21	324403	1113302	15050303	I	1270.0	250.0	1250.0
	D-08-08 10CDD	4	21	324405	1113025	15050100	I	1000.0	380.0	500.0
									383.0	1000.0
	D-08-08 1[illegible]DDD	4	21	324312	1112854		I	1020.0	170.0	600.0
									622.0	702.0
									180.0	622.0
									622.0	1020.0
	D-08-08 18CDD1	4	21	324312	[illegible]	15050303	U	600.0	-	-
									830.0	1450.0
	D-08-08 29BCC	4	21	324152	1112254	15050303	I	1680.0	1100.0	1390.0
									1380.0	1670.0
	D-08-08 31DAA	4	21	324058	1113305	15050303	I	1010.0	320.0	1000.0
	D-08-09 07ADD	4	21	324429	1112648	15050100	I	1380.0	550.0	1000.0
									1000.0	1380.0
	D-08-10 04BBB2	4	21	[illegible]	[illegible]	15050100	H	600.0	-	-
	D-08-11 31BBB	4	21	324157	1111531	15050100	U	936.0	440.0	821.0
	D-08-12 19DDC	4	21	324304	[illegible]	15050100	H	38.0	-	-
	D-09-07 04ADD	4	21	[illegible]	1113711	15050303	I	1240.0	190.0	1140.0
									1140.0	1240.0
	D-09-07 16DDD2	4	21	323754	1113716	-	I	1800.0	350.0	1260.0
									1270.0	1790.0
	D-09-07 25CDD	4	21	323611	1113434	15050303	U	1260.0	400.0	1210.0
	D-09-07 25DDA1	4	21	323616	1113405	15050303	U	600.0	164.0	580.0
	D-09-07 25DDA2	4	21	323616	1113406	15050303	I	1120.0	580.0	1020.0
									985.0	1100.0
	D-09-07 27DDD1	4	21	323628	1113609	15050303	U	640.0	-	-
	D-09-07 27DDD3	4	21	323615	1113610	15050303	I	1400.0	1160.0	1400.0
	D-09-08 06DDD	4	21	323943	1113308	15050303	I	392.0	-	-
	D-09-08 17CDD	4	21	323708	1113234	15050303	I	600.0	-	-
	D-09-08 20ADD	4	21	323731	1113159	15050303	I	1120.0	730.0	1110.0
	D-09-08 20ADD2	4	21	323732	1113201	-	I	1600.0	-	-
	D-09-08 30DDD1	4	21	323612	1113306	15050303	U	600.0	180.0	580.0
	D-09-08 35ADD2	4	21	323545	1112858	15050303	I	875.0	390.0	845.0
									350.0	700.0
									706.0	720.0
									390.0	845.0
									845.0	875.0
	D-09-10 19AAA	4	21	323755	1112043	15050303	U	600.0	240.0	486.0
									486.0	600.0
	D-09-10 19ADD	4	21	323730	1112045	15050303	I	865.0	250.0	810.0
									822.0	865.0
	D-09-13 07CBC	4	21	323942	1110302	15050100	S	275.0	-	-
	D-09-13 20DBA	4	21	323759	1110115	-	S	-	-	-
	D-09-13 27CBA	4	21	323708	1105942	15050303	S	550.0	-	-
	D-10-09 10AAD1	4	21	323414	1112350	15050303	U	450.0	200.0	448.0
	D-10-09 18AAC2	4	21	323321	1112710	15050303	S	-	-	-
	D-10-09 21AAD	4	21	323233	1112452	15050303	S	405.0	160.0	280.0
									280.0	405.0
	D-10-10 05DAD	4	21	323442	1111945	15050303	I	580.0	170.0	450.0
	D-10-10 20DCC	4	21	323152	1112007	15050303	S	290.0	-	-
	D-10-11 17CAB2	4	21	323338	1111415	-	S	-	-	-
	D-11-10 13AAA1	4	19	322847	1111615	15050303	U	520.0	160.0	508.0
	D-11-10 15AAD	4	19	322837	1111813	15050303	U	396.0	160.0	394.0
	D-11-10 24AAA	4	19	322756	1111611	15050303	I	500.0	170.0	490.0
	D-11-11 07DDD	4	19	322856	1111503	15050303	I	680.0	320.0	680.0
	D-11-11 11DCD	4	19	322904	1111110	15050303	S	505.0	405.0	505.0
	D-11-11 16CDD2	4	19	322805	1111331	-	I	906.0	360.0	594.0
									609.0	769.0
	D-11-11 18DDD	4	19	322804	1111503	15050303	I	596.0	160.0	580.0
	D-11-11 28ACC1	4	19	322647	1111316	15050303	U	500.0	200.0	485.0
									976.0	980.0
	D-11-11 34DDD	4	19	322530	1111200	15050303	I	492.0	215.0	490.0
	D-11-11 35DDD	4	19	322530	1111100	15050303	I	502.0	400.0	480.0
	D-12-11 12BDC	4	19	322411	1111038	15050303	I	585.0	270.0	538.0
	D-12-12 16CBC	4	19	322305	1110750	15050303	I	242.0	90.0	234.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
LSC RES	D-03-04 35DCB	4	21	330715	1115457	15050100	I	-	-	-
	D-04-03 09CDD PZ1	4	21	330517	1120323	15050303	U	1200.0	1200.0	1200.0
	D-04-03 09CDD PZ2	4	21	330517	1120323	15050303	U	430.0	420.0	430.0
	D-04-04 07CDD	4	21	330518	1115913	15050303	U	-	-	-
	D-04-05 02BCB	4	21	330649	1114922	15050100	I	865.0	-	-
	D-04-05 15BAD	4	21	330505	1114954	15050100	I	480.0	110.0	470.0
	D-04-06 05ADD	4	21	330647	1114516	15050100	I	-	-	-
	D-04-06 23BAA	4	21	330423	1114245	15050100	I	450.0	30.0	165.0
									68.0	445.0
	D-04-08 02CCC	4	21	330614	1113027	15050100	U	485.0	-	-
	D-09-05 29CDC	4	21	323633	1115222	15050305	H	123.0	80.0	-
	D-10-04 33DDC1	4	21	323027	1115700	15050306	S	218.0	170.0	200.0
	D-12-03 23AAD UNSURV	4	19	322215	1120141	15050306	S	-	238.0	258.0
									258.0	265.0
	D-15-07 16CBB2	4	19	320712	1114050	15050305	P	-	630.0	-
LSP	D-05-15 25BCD	4	21	325810	1104616	15050203	I	68.0	-	-
	D-06-16 08DAC5	4	21	325526	1104338	15050203	H	54.0	-	-
	D-07-16 22ADD	4	21	324840	1104120	15050203	I	-	-	-
	D-08-16 25DCD	4	21	324208	1103933	15050203	U	2140.0	-	-
	D-08-17 18BAA	4	21	324437	1103849	15050203	U	75.0	-	-
	D-09-15 36BBC	4	21	323644	1104612	15050203	H	92.0	-	-
	D-09-17 04ADA	4	21	324058	1103612	15050203	I	-	-	-
	D-12-18 24AAB	4	19	322253	1102700	15050203	I	-	-	-
	D-12-19 19ADB	4	3	322247	1102616	15050203	U	80.0	-	-
	D-13-18 02BDD	4	19	322003	1102837	15050203	H	249.0	-	-
	D-13-19 12DCC	4	3	321848	1102121	15050203	S	102.0	-	-
	D-13-19 25BBB	4	3	321656	1102153	15050203	I	145.0	45.0	-
	D-14-20 34CAA	4	3	321017	1101714	15050203	H	145.0	-	-
	D-15-20 10CAB	4	3	320836	1101723	15050203	I	-	-	-
LVR	A-03-06 15ABA	4	13	333635	1114321	15060203	P	735.0	450.0	735.0
									447.0	735.0
	A-03-07 30BAD	4	13	333447	1114029	15060203	P	65.0	-	-
	A-04-07 07BBA	4	13	334243	1114046	15060203	U	-	-	-
	A-05-06 31DDD	4	13	334341	1114612	-	P	750.0	500.0	750.0
	A-10-10 04ABA	4	7	341442	1111953	15060105	U	-	-	-
	A-10-10 04DBA	4	7	341418	1111949	15060105	H	-	-	-
	A-10-10 05CCA	4	7	341408	1112120	15060203	U	150.0	-	-
	A-10-10 05CCB	4	7	341408	1112129	15060203	U	44.5	-	-
	A-10-10 10BCB	4	7	341339	1111913	15060105	P	108.0	-	-
	A-11-10 27CCB	4	7	341547	1111925	15060203	P	400.0	100.0	400.0
	A-11-10 27DDB	4	7	341551	1111842	15060203	P	400.0	100.0	400.0
	A-11-10 31DAC	4	7	341504	1112146	15060203	P	330.0	100.0	330.0
	A-11-10 32ACD	4	7	341518	1112054	-	H	400.0	44.0	400.0
	A-11-10 35CCC	4	7	341447	1111825	-	H	200.0	75.0	115.0
									135.0	200.0
MMU	B-05-12 30DDD	4	27	334429	1133234	15070104	I	400.0	50.0	200.0
	B-05-12 32ADB	4	27	334412	1133134	15070104	K	136.0	-	-
	B-05-13 01ACB	4	27	334827	1133357	15070104	I	800.0	-	-
	B-05-13 05CBB	4	27	334817	1133839	15070104	H	755.0	-	-
	B-05-13 08DAA	4	27	334427	1133738	15070104	I	504.0	210.0	-
	B-05-13 19BBD2	4	27	334557	1133932	15070104	U	-	330.0	430.0
	B-05-13 28ACC	4	27	334452	1133704	15070104	U	723.0	122.0	-
	B-06-11 05ADD	4	27	335334	1132507	15070104	U	800.0	-	-
	B-06-12 13DCD	4	27	335122	1132733	15070104	I	1200.0	350.0	506.0
									506.0	1190.0
									1190.0	1200.0
	B-06-12 15BBB	4	27	335211	1133019	15070104	I	1430.0	950.0	1000.0
	B-06-12 19BBA	4	12	335119	1133312	15070104	I	-	-	-
	B-06-13 28DBD2	4	27	334955	1133652	15070104	S	580.0	500.0	580.0
	B-07-07 17DCC	4	13	335637	1130028	15070104	P	660.0	500.0	-
	B-07-08 15BAA	4	13	335727	1130451	15070104	U	1810.0	505.0	-
	B-07-08 20DDD	4	13	335545	1130621	15070104	U	1000.0	-	-
	B-07-09 33ABB	4	13	335449	1131206	15070104	S	700.0	-	-
	B-07-10 13CDD	4	13	335636	1131519	15070104	I	800.0	365.0	-
	B-07-10 19AAA	4	13	335633	1131957	15070104	I	1500.0	359.0	449.0
									489.0	910.0
									910.0	1330.0
									1330.0	1500.0
	B-07-12 26BCC	4	27	335518	1132913	15070104	U	340.0	5.0	-
	B-08-07 33ABC	4	13	335952	1125928	15070104	U	-	-	-
	B-08-09 28ABB	4	25	340052	1131201	15070104	U	-	-	-
	B-08-10 36BBB	4	13	340003	1131545	15070104	I	1350.0	287.0	772.0
									772.0	1350.0
N-C	A-04-01 01BAA	4	13	334327	1121242	-	U	-	-	-
	A-04-02 11ADB	4	13	334230	1120709	15070102	T	900.0	425.0	600.0
	A-04-02 14BBB	4	13	334153	1120802	-	U	1190.0	300.0	650.0
									650.0	1190.0
	A-04-04 06BBB	4	13	334332	1115942	15060106	U	1280.0	584.0	1250.0
									1280.0	1280.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
N-C--	A-05-01 10AAB	4	13	334745	1121426	15070102	H	438.0	315.0	-
Cont.	A-05-02 04CAB	4	13	334814	1120947	-	H	600.0	390.0	600.0
	A-05-02 10ABA	4	13	334750	1120824	15070102	C	519.0	106.0	519.0
	A-05-04 09ABB	4	13	334756	1115704	-	U	-	-	-
	A-06-02 25BDD1	4	13	335010	1120630	15070102	H	480.0	432.0	480.0
	A-06-02 30AAA	4	13	335033	1121114	15070102	S	230.0	-	-
	A-06-04 21DAC	4	13	335052	1115647	15060106	H	350.0	-	-
	A-06-05 31CCC2	4	13	334850	1115324	-	P	1160.0	276.0	1160.0
	A-07-02 24BDA	4	13	335623	1120636	15070102	H	-	-	-
	A-07-03 30CCC	4	13	335455	1120551	15070102	D	135.0	-	-
	B-05-01 14CAB	4	13	334625	1122011	-	K	1220.0	40.0	1220.0
PRZ	A-18-23 06CDC2	4	17	345901	1095640	15020007	U	170.0	-	-
	A-18-30 20CDD	4	1	345613	1091055	15020004	S	420.0	-	-
	A-19-29 17ACB2	4	1	350250	1091710	15020007	S	465.0	441.0	-
	A-21-28 23AAC	4	1	351224	1092024	15020007	S	175.0	-	-
RAN	B-03-12 19AAA	4	12	333541	1133132	15030105	S	577.0	377.0	577.0
	B-03-13 28ADC	4	12	333425	1134549	-	S	420.0	-	-
	B-04-14 32BAA	4	27	333910	1134328	15030105	I	905.0	280.0	605.0
									605.0	905.0
	B-04-15 11ADD	4	27	334213	1134603	15030105	U	-	-	-
	B-04-15 13ADA	4	27	334132	1134458	15030105	I	952.0	300.0	610.0
									610.0	952.0
	B-05-15 06BAA2	4	27	334839	1135141	15030105	U	-	-	-
	B-05-15 35BDD2	4	27	334357	1134732	15030105	I	800.0	250.0	626.0
									626.0	800.0
	B-06-16 12AAA	4	12	335300	1135213	15030105	I	422.0	-	-
	B-06-16 22ADA	4	27	335102	1135413	15030105	I	510.0	250.0	-
	B-06-16 33AAA	4	27	334931	1135519	15030105	I	700.0	235.0	-
	B-07-17 22ABC1	4	27	335622	1140056	15030105	H	176.0	-	-
	B-07-17 23CAB	4	27	335555	1140009	15030105	P	-	-	
SAC	B-17-17 19WBAD	4	15	345041	1140812	15030103		450.0	-	-
	B-20-18 22AAC	4	15	350633	1141037	15030103	U	800.0	-	-
	B-21-17 24CBC	4	15	351123	1140322	15030103	P	140.0	-	-
	B-21-17 34DDB	4	15	350937	1140442	15030103	U	80.0	-	-
	B-21-18 21BCC	4	15	351135	1141259	15030103	H	-	-	-
SAF	D-04-22 35ADA	4	9	330240	1100311	15040005	S	75.0	-	-
	D-05-23 02DBC	4	9	330128	1095724	15040005	I	-	-	-
	D-05-23 03CAB	4	9	330135	1095838	15040005	I	-	-	-
	D-05-23 25DCD	4	9	325742	1095609	15040005		-	-	-
	D-05-24 08CCB2	4	9	330029	1095448	15040005	I	-	-	-
	D-06-25 25CDD	4	9	325230	1094428	15040005	I	50.0	30.0	44.0
	D-06-25 30DAC	4	9	325248	1094916	15040005	I	170.0	-	-
	D-06-26 08CCD	4	9	325510	1094247	15040005	N	580.0	280.0	580.0
	D-07-26 18CDA1	4	9	324908	1094330	15040005	I	85.0	-	-
	D-07-26 22BAB	4	9	324855	1094033	15040005	I	90.0	-	-
	D-07-27 02ADD	4	9	325115	1093245	15040005	H	60.0	-	-
	D-08-26 33CCC1	4	9	324113	1094154	15040005	I	400.0	-	-
SAF RES	D-04-21 33BAC	4	9	330245	1101202	15040005	U	-	-	-
	D-04-21 34BAC	4	9	330244	1101104	15040005	U	-	-	-
	D-04-22 35BDD1	4	9	330234	1100342	15040005	U	-	-	-
SBV	D-23-31 29DCA2	4	3	312340	1091216	15080302	H	250.0	-	-
	D-24-30 16CCC	4	3	312006	1091806	15080302	S	100.0	35.0	-
SFP	A-20-06 02BBC	4	5	350856	1114416	15020015	P	1600.0	1050.0	1300.0
									1290.0	1600.0
	A-20-08 18BBB	4	5	350716	1113544	15020015		1210.0	790.0	810.0
									816.0	826.0
									829.0	894.0
	A-21-05 02ABC3	4	5	351409	1115003	15060202	U	110.0	-	-
	A-21-06 35CBA	4	5	350924	1114401	15020015	P	1600.0	1200.0	1600.0
	A-22-06 23DBC3	4	5	351620	1114332	15020015	U	127.0	-	-
	A-22-06 25CAB1	4	5	351537	1114245	15020015	H	250.0	-	-
	A-22-06 25CAC2	4	5	351529	1114249	15020015	H	40.0	-	-
	A-22-06 27ADA1	4	5	351551	1114411	15020015	U	66.0	22.0	40.0
									60.0	66.0
	A-22-06 27DBC1	4	5	351527	1114437	15020015	H	-	-	-
	A-22-07 32CBB	4	5	351442	1114100	15020015	H	140.0	-	-
	A-24-05 11CAC	4	5	352831	1115014	15020016	S	346.0	55.0	280.0
									280.0	300.0
									301.0	346.0
	A-25-06 20ACC	4	5	353210	1114624	15020016		139.0	-	-
SFP RES	05 132-00.14X13.82	4	5	351758	1110009	15020008	P	405.0	40.0	405.0
	05 132-00.52X14.00	4	5	351749	1110034	15020008	P	400.0	300.0	400.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
SNO	A-12-22E19ADD	4	17	342532	1100229	15020002	I	320.0	90.0	-
	A-13-21 10CDA	4	17	343150	1100630	15020005	U	416.0	-	-
	A-13-21 24CCB	4	17	343009	1100435	15020005	I	328.0	-	-
	A-13-21 34DCC2	4	17	342811	1100612	15020002	H	254.0	-	-
SRV	A-01-01 04AAA2	4	13	332753	1121517	15060106	U	514.0	150.0	355.0
	A-01-01 19DCD1	4	13	332424	1121735	15070101	U	100.0	-	-
	A-01-02 09AAB2	4	13	332702	1120916	15060106	I	500.0	140.0	465.0
									480.0	-
	A-01-02 19BAA	4	13	332521	1121141	15060106	I	208.0	60.0	199.0
	A-01-02 26AAA	4	13	332423	1120700	15060106	I	430.0	20.0	125.0
									65.0	375.0
	A-01-03 01DDD	4	13	332707	1115941	15060106	I	155.0	25.0	75.0
	A-01-03 05BAA	4	13	332752	1120425	-	U	-	-	-
	A-01-03 18BBC	4	13	332600	1120548	15060106	I	410.0	-	-
	A-01-04 13ADC3	4	13	332551	1115339	-	H	-	-	-
	A-01-04 18DAD	4	13	332532	1115840	15060106	U	200.0	50.0	122.0
									139.0	200.0
	A-01-04 22DBC	4	13	332440	1115602	15060106	P	513.0	-	-
	A-01-04 25DDC	4	13	332338	1115339	15060106	P	570.0	270.0	520.0
	A-01-04 27AAA2	4	13	332426	1115532	15060106	I	500.0	150.0	475.0
									490.0	500.0
	A-01-05 06BDD	4	13	332738	1115259	15060106	U	300.0	90.0	-
	A-01-05 08AAA2	4	13	332702	1115122	15060106	N	360.0	150.0	-
	A-01-05 14BCC	4	13	332549	1114918	-	P	1000.0	400.0	988.0
	A-01-05 21DCC	4	13	332430	1115051	-	P	1010.0	500.0	1000.0
									1010.0	1010.0
	A-01-05 22DDD	4	13	332428	1114920	15060106	P	1000.0	515.0	645.0
									655.0	660.0
									660.0	980.0
	A-01-05 26DDD	4	13	332337	1114818	15050100	I	360.0	-	-
	A-01-05 27DCC	4	13	332339	1114946	15060106	I	775.0	200.0	670.0
									685.0	775.0
	A-01-05 29DDA	4	13	332346	1115124	15060106	U	490.0	210.0	465.0
									480.0	490.0
	A-01-05 30BDD	4	13	332402	1115304	15060106	I	442.0	90.0	430.0
	A-01-05 32DCC	4	13	332244	1115151	15060106	I	1010.0	450.0	992.0
									1010.0	1010.0
	A-01-05 35BAA	4	13	332336	1114949	15060106	I	700.0	190.0	495.0
									512.0	688.0
	A-01-06 03ADA	4	13	332746	1114306	15060106	U	664.0	-	-
	A-01-06 08CCD2	4	13	332615	1114558	15060106	I	690.0	280.0	676.0
	A-01-06 14AAA2	4	13	332613	1114205	15060106	P	800.0	400.0	780.0
	A-01-06 25ADA1	4	13	332414	1114103	15050100	I	1050.0	303.0	-
										1040.0
									1050.0	1050.0
	A-01-07 11CAA	4	13	332636	1113623	15050100	H	-	-	-
	A-01-07 18ACC	4	13	332547	1114027	-	U	1040.0	650.0	1000.0
	A-01-07 36DAA5	4	13	332307	1113449	15050100		1270.0	750.0	1270.0
	A-01-07 32ACA	4	7	332317	1113916	-	U	680.0	-	-
	A-01-08 10DCC	4	21	332614	1113111	15050100	C	300.0	100.0	300.0
	A-01-08 25CBA	4	13	332357	1112924	15050100	H	450.0	340.0	-
	A-02-01 14BBA	4	13	333122	1121404	15070102	I	700.0	180.0	685.0
	A-02-01 31DAA	4	13	332816	1121723	15070102	I	413.0	200.0	413.0
	A-02-02 18DDD	4	13	333036	1121110	15060106	I	390.0	180.0	215.0
									45.0	205.0
									215.0	340.0
	A-02-03 07CAA	4	13	333152	1120529	15060106	U	202.0	50.0	192.0
	A-02-03 35BBC	4	13	332838	1120143	15060106	I	620.0	-	-
	A-02-04 01BCC	4	13	333247	1115424	15060106	I	1000.0	450.0	770.0
									770.0	1000.0
	A-02-04 01DAA1	4	13	333243	1115328	15060106	P	524.0	160.0	500.0
	A-02-04 02BBB	4	13	333309	1115528	15060106	P	968.0	0.	600.0
									600.0	968.0
									313.0	600.0
									600.0	968.0
	A-02-04 11AAD2	4	13	333206	1115427	15060106	I	1100.0	400.0	785.0
									800.0	1100.0
	A-02-04 11BAD	4	13	333206	1115500	15060106	I	280.0	92.0	142.0
	A-02-04 14ACB	4	13	333108	1115459	15060106	H	726.0	300.0	700.0
									713.0	726.0
	A-02-04 15DBD	4	13	333053	1125547	15060106	I	798.0	130.0	228.0
									250.0	617.0
									165.0	297.0
									297.0	480.0
									480.0	798.0
	A-02-04 22BDD	4	13	333009	1115604	15060106	U	567.0	370.0	491.0
									483.0	567.0
	A-02-04 22DCC	4	13	332942	1115602	15060106	I	630.0	300.0	576.0
									590.0	630.0
	A-02-04 23BCC2	4	13	333009	1115531	15060106	I	780.0	300.0	750.0
									770.0	780.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
SRV--Cont.	A-02-04 24BAD	4	13	333021	1115359	15060106	I	1300.0	190.0	444.0
									460.0	790.0
									1010.0	1300.0
									456.0	490.0
									790.0	1010.0
	A-02-04 27BCB2	4	13	332928	1115631	15060106	P	800.0	238.0	566.0
									546.0	792.0
									792.0	800.0
	A-02-04 29DAB	4	13	332913	1115753	-	H	-	-	-
	A-02-05 19ABA	4	13	333033	1115247	15060106	I	1110.0	450.0	984.0
									984.0	1110.0
	A-02-05 22BAA	4	13	333029	1114949	15060106	I	750.0	245.0	545.0
	A-02-06 32ACD	4	13	332825	1114529	15060106	I	800.0	300.0	-
	A-02-07 33BCB	4	13	332833	1113853	-	U	-	-	-
	A-03-01 11DDA	4	13	333648	1121310	15070102	I	474.0	150.0	456.0
	A-03-01 21CBB	4	13	333513	1121617	15070102		505.0	237.0	492.0
	A-03-01 35ABB	4	13	333358	1121342	15070102	I	810.0	252.0	-
	A-03-02 22BAA	4	13	333546	1120532	15060106	U	851.0	195.0	840.0
	A-03-02 24CCB	4	13	333505	1120654	15060106	I	835.0	400.0	643.0
									643.0	825.0
									825.0	-
	A-03-02 29DDA2	4	13	333415	1121007	15060106	I	1000.0	500.0	980.0
	A-03-03 13BDB3	4	13	333623	1120023	15060106	P	710.0	340.0	430.0
									498.0	686.0
	A-03-03 32DAA	4	13	333338	1120357	-	P	520.0	275.0	450.0
									462.0	520.0
	A-03-04 02BBB	4	13	333823	1115527	15060106	P	1740.0	720.0	974.0
									699.0	1330.0
	A-03-04 17BAA	4	13	333640	1115808	15060106	I	981.0	440.0	917.0
	A-03-04 24CAA	4	13	333520	1115358	15060106	U	1280.0	220.0	700.0
	A-03-04 25BBB	4	13	333448	1115428	15060106	P	1600.0	740.0	1560.0
									1560.0	1600.0
	A-03-04 26CBB	4	13	333427	1115530	15060106	I	485.0	185.0	220.0
									238.0	485.0
	A-03-04 27DDD2	4	13	333404	1115532	15060106	I	600.0	240.0	600.0
	A-03-04 34ADD	4	13	333337	1115537	15060106	I	885.0	205.0	875.0
	A-03-04 34CAC	4	13	333327	1115614	15060106	I	1400.0	744.0	1290.0
									1290.0	1400.0
	A-03-05 17DCC2	4	13	333552	1115145	15060106	H	980.0		-
	A-03-05 21BBA	4	13	333546	1115108	15060106	I	480.0	460.0	480.0
	A-03-05 25CAB	4	13	333427	1114757	15060106	H	705.0	-	-
	A-03-05 28ADA	4	13	333448	1115021	15060106	P	890.0	480.0	880.0
									496.0	530.0
	A-03-07 06CDA	4	13	333746	1114031	-	P	-	-	-
	A-04-01 18DAA	4	13	334120	1121722	15070102	U	771.0	200.0	716.0
	A-04-01 22AAA	4	13	334052	1121414	15070102	U	723.0	201.0	701.0
	A-04-01 30AAB2	4	13	334000	1121730	15070102	H	870.0	145.0	282.0
									600.0	-
									360.0	600.0
									600.0	860.0
	A-04-02 19BCC	4	13	334033	1121207	15070102	U	672.0	154.0	652.0
									652.0	672.0
	A-04-02 20CDD	4	13	334011	1121043	15070102	U	528.0	160.0	455.0
									465.0	528.0
	A-04-02 36AAA	4	13	333918	1120558	15060106	U	670.0	300.0	655.0
	A-04-03 05DCC2	4	13	334236	1120424	-	H	500.0	220.0	500.0
	A-04-03 36AAA1	4	13	333917	1115945	-	H	700.0	300.0	680.0
	A-05-01 33BCC	4	13	334358	1121615	-	H	-	-	-
	A-05-04 25DBD	4	13	334446	1115342	15060106	U	-	-	-
	A-05-04 33DAA	4	13	334353	1115634	15060106	U	993.0	967.0	993.0
	B-01-01 12BAA2	4	13	332656	1121652	15070102	I	403.0	175.0	380.0
	B-01-01 17AAA1	4	13	332604	1122230	15070102	U	221.0	45.0	218.0
	B-01-02 05CBB	4	13	332725	1122943	15070101	U	400.0	-	-
	B-01-02 16BBB	4	13	332607	1122840	-	I	1100.0	700.0	998.0
									1010.0	1100.0
	B-01-02 28CBD	4	13	332348	1122832	15070101	I	186.0	36.0	-
	B-01-02 36BBC	4	13	332320	1122532	15070101	U	305.0	35.0	164.0
	B-01-03 19CBB	4	13	332445	1123625	15070101	I	300.0	160.0	287.0
	B-01-03 21DBB	4	13	332449	1123350	15070101	I	425.0	85.0	425.0
	B-01-03 34BBB	4	13	332330	1123319	15070101	I	200.0	74.0	186.0
	B-01-04 27ABB	4	13	332416	1123901	15070101	I	350.0	70.0	350.0
	B-01-04 28DAA	4	13	332356	1123934	15070101	S	385.0	100.0	358.0
	B-02-01 14CBB	4	13	333052	1122024	15070102	U	708.0	145.0	690.0
	B-02-01 18CBB2	4	13	333055	1122431	15070102	I	737.0	326.0	720.0
	B-02-01 20BCC	4	13	333006	1122326	15070102	I	790.0	335.0	629.0
	B-02-01 33BBB2	4	13	332840	1122227	15070102	I	318.0	110.0	278.0
	B-02-02 02BAD	4	13	333258	1122607	15070102	I	715.0	-	-
	B-02-02 04DCB	4	13	333223	1122309	15070102	U	480.0	-	-
	B-02-02 22ABB	4	13	333028	1122707	15070102	U	1340.0	220.0	557.0
									1280.0	1340.0
									557.0	1280.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
SRV--Cont.	B-02-02 25CBB2	4	13	332910	1122533	15070102	I	1720.0	180.0	690.0
									1410.0	1420.0
									1430.0	1440.0
									1460.0	1460.0
									1480.0	1500.0
									1510.0	1580.0
									1600.0	1620.0
									1640.0	1640.0
									1660.0	1680.0
	B-03-01 05ABB	4	13	333818	1122304	15070102	I	803.0	275.0	780.0
	B-03-01 08ABB1	4	13	333725	1122303	15070102	U	1200.0	200.0	800.0
									800.0	1190.0
	B-03-01 16DAB	4	13	333607	1122145	15070102	I	750.0	-	-
	B-03-01 24BBB3	4	13	333539	1121923	15070102	I	1200.0	-	-
	B-03-01 27BBB	4	13	333448	1122128	15070102	U	572.0	170.0	560.0
	B-03-01 29BCC	4	13	333425	1122333	15070102	I	1400.0	-	-
	B-03-01 34DBB1	4	13	333330	1122058	15070102	I	350.0	180.0	340.0
	B-03-02 14BCB2	4	13	333619	1122635	-	I	1610.0	428.0	993.0
									993.0	1610.0
	B-03-02 21ABA	4	13	333541	1122801	15070102	U	534.0	280.0	412.0
	B-04-01 09BCD	4	13	334218	1122227	15070102	U	500.0	182.0	484.0
	B-04-01 19BDC	4	13	334030	1122421	15070102	I	1000.0	230.0	485.0
									500.0	982.0
	B-04-02 05DBB	4	13	334307	1122909	15070102	H	600.0	450.0	600.0
	B-04-02 27DCD	4	13	333915	1122655	15070102	I	1000.0	220.0	484.0
									500.0	990.0
	B-04-02 36BCB	4	13	333858	1122532	15070102	I	1030.0	450.0	-
	B-04-03 04BDB	4	13	334314	1123437	-	H	562.0	-	-
	B-04-03 14ABA	4	13	334147	1123203	-	H	605.0	500.0	580.0
	B-05-02 24BAB	4	13	334603	1122527	-	H	600.0	-	-
	B-05-02 30ADD	4	13	334448	1122956	15070103	H	684.0	364.0	384.0
	B-05-02 35BAA	4	13	334418	1122617	15070102	I	1150.0	300.0	555.0
									555.0	1150.0
	B-05-03 15AAA	4	13	334654	1123304	15070102	H	600.0	500.0	600.0
	B-05-03 22ADD	4	13	333038	1123301	-	H	540.0	500.0	540.0
	B-06-02 18DBB	4	13	335138	1123020	-	T	-	-	-
									902.0	910.0
	B-06-03 33DCB	4	13	334848	1123429	15070102	C	800.0	-	-
	C-01-02 08CDA	4	13	332102	1122641	15070101	U	185.0	-	-
	C-01-03 08CBD	4	13	332108	1123511	15070101	U	520.0	429.0	520.0
	C-01-04 03ABB	4	13	332238	1123859	15070101	U	-	-	-
	C-01-04 07BDD	4	13	332121	1124209	15070101	I	210.0	60.0	190.0
	C-01-04 26ABB	4	13	331906	1123800	-	I	450.0	-	-
	D-01-01 13DDD1	4	13	332003	1121211	15050100	U	740.0	-	-
	D-01-02 20DAA	4	13	331933	1121007	15060106	I	300.0	90.0	200.0
									200.0	300.0
	D-01-03 02BDB	4	13	332221	1120131	15060106	U	165.0	-	-
	D-01-04 27DAA2	4	13	331844	1115542	-	P	1010.0	-	-
	D-01-04 28CBC	4	13	331839	1115743	15050100	H	600.0	-	-
	D-01-04 36DDD	4	13	331731	1115337	15050100	I	324.0	147.0	310.0
	D-01-05 36DDD	4	13	331732	1114723	15050100	I	500.0	-	-
	D-01-06 04DAA	4	13	332214	1114421	15050100	I	800.0	210.0	728.0
	D-01-06 11CDD2	4	13	332102	1114245	15050100	I	-	-	-
	D-01-06 24CCC2	4	13	331918	1114211	15050100	I	1010.0	260.0	996.0
	D-01-06 27DDD2	4	13	331832	1114316	15050100	I	735.0	-	-
	D-01-06 29DAA	4	13	331843	1114519	-	I	965.0	-	-
	D-01-07 25ADD	4	13	331850	1113500	15050100	S	-	-	-
	D-01-07 31BAC1	4	13	331816	1114052	15050100	U	500.0	150.0	480.0
	D-01-08 21ADB PZ1	4	21	331953	1113150	15050100	U	830.0	806.0	830.0
	D-01-08 21ADB PZ2	4	21	331953	1113150	15050100	U	470.0	461.0	470.0
	D-01-09 07BDC2	4	21	332135	1112818	15050100	P	1000.0	-	-
	D-01-10 35DBA	4	21	331803	1111729	-	I	440.0	55.0	440.0
	D-02-03 22DDD	4	13	331407	1120148	15050100	I	242.0	100.0	242.0
	D-02-05 07ADD	4	13	331608	1115233	15050100	I	224.0	125.0	210.0
	D-02-05 09DDD	4	13	331545	1115027	15050100	I	290.0	130.0	270.0
	D-02-05 20DDA	4	13	331411	1115129	15050100	I	656.0	200.0	-
									250.0	640.0
	D-02-05 33AAD2	4	13	331256	1115027	15050100	I	615.0	390.0	613.0
	D-02-06 04BDD	4	13	331707	1114447	15050100	I	990.0	100.0	586.0
									600.0	975.0
	D-02-06 12DDA1	4	13	331557	1114108	15050100	U	600.0	-	-
	D-02-06 26DDD	4	13	331310	1114210	15050100	U	717.0	231.0	707.0
									707.0	717.0
	D-02-06 31AAA	4	13	331308	1114621	15050100	U	285.0	-	-
	D-02-07 03CDD	4	13	331644	1113732	15050100	I	520.0	100.0	460.0
									460.0	520.0
	D-02-07 04ADD	4	13	331708	1113805	15050100	I	1520.0	291.0	574.0
									574.0	814.0
									814.0	1510.0
									1510.0	1520.0
	D-02-07 25DDD3	4	13	331313	1113503	15050100	I	750.0	-	-
	D-02-07 27DDA	4	13	331324	1113400	-	I	600.0	200.0	588.0

See codes used to identify State, County, and Primary Use of Water at end of table.

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
SRV--Cont.	D-02-08 02CBB PZ1	4	21	331703	1113034	15050100	U	1520.0	1510.0	1520.0
	D-02-08 02CBB PZ2	4	21	331703	1113034	15050100	U	864.0	855.0	864.0
	D-02-08 20DDA	4	21	331410	1113244	-	I	804.0	240.0	790.0
	D-02-08 27DDD	4	21	331314	1113040	15050100	I	614.0	260.0	600.0
	D-02-08E07DDD	4	21	331550	1113348	15050100	I	600.0	250.0	585.0
	D-02-09 36DBD	4	21	331236	1112239	15050100	P	890.0	870.0	890.0
	D-02-10 16BCB	4	21	331532	1112009	15050100	P	425.0	-	-
	D-02-10 21ADB	4	13	331440	1111924	-	U	-	-	-
	D-02-12 07ABA	4	21	331640	1110908	-	I	21.0	-	-
	D-03-08 04BBA	4	21	331219	1113229	15050100	I	1000.0	260.0	600.0
									612.0	620.0
									495.0	997.0
	D-03-08 19ADD	4	21	330917	1113345	-	U	-	-	-
	D-03-08 20BDC	4	21	330917	1113317	15050100	U	-	240.0	488.0
	D-03-08 35BAA	4	21	330757	1113000	15050100	U	720.0	216.0	450.0
									476.0	720.0
	D-03-09 09DCD PZ1	4	21	331042	1112543	15050100		1160.0	1150.0	1160.0
	D-03-09 09DCD PZ2	4	21	331042	1112543	15050100		681.0	672.0	681.0
	D-03-09 20DAA	4	21	330915	1112620	15050100	I	757.0	237.0	557.0
									557.0	757.0
	D-03-09 32ABA	4	21	330757	1112634	15050100	U	600.0	248.0	418.0
	D-04-09 05AAB2	4	21	330705	1112628	15050100	H	600.0	390.0	427.0
									420.0	600.0
SRV RES	A-02-05 08AAA	4	13	333217	1115123	15060106	U	1000.0	305.0	-
										550.0
									550.0	690.0
									700.0	990.0
									990.0	1000.0
	A-02-05 10DDD1	4	13	333132	1114923	15060106	S	550.0	375.0	-
	A-02-05 15AAA	4	13	333126	1114918	15060106	I	658.0	275.0	302.0
									392.0	434.0
									438.0	454.0
									470.0	480.0
									496.0	504.0
									542.0	558.0
									569.0	566.0
									594.0	630.0
									642.0	658.0
	A-02-05 15DAA	4	13	333100	1114918	15060106	I	1100.0	246.0	252.0
									600.0	1090.0
									266.0	314.0
									332.0	338.0
									397.0	414.0
									430.0	442.0
									458.0	463.0
									477.0	498.0
									509.0	518.0
									529.0	538.0
									569.0	585.0
	A-02-05 16AAA	4	13	333127	1115020	15060106	I	1050.0	225.0	500.0
									515.0	1050.0
	A-02-05 30DBC	4	13	332903	1115254	15060106	I	600.0	275.0	586.0
	D-02-04 08DBA	4	13	331607	1115759	15050100	R	400.0	-	-
	D-02-04 25DDD	4	13	331310	1115333	15050100	I	610.0	250.0	575.0
SSI	027S21W07AAB	35	23	315836	1090115		I	400.0	-	-
	028S21W31BCC	35	23	314935	1090159		I	-	-	-
	D-12-27 32AAB	4	3	322110	1093627	15040006	S	250.0	-	-
	D-12-28 15BCB	4	3	322334	1092858	15040006	H	1000.0	-	-
	D-12-28 25DCC	4	3	322116	1092622	15040006		1700.0	720.0	860.0
									860.0	1340.0
	D-12-28 33ABC1	4	3	322103	1092930	15040006	I	550.0	403.0	-
	D-13-28 22BCC	4	3	321721	1092860	15040006	U	892.0	-	-
	D-13-29 18BDB	4	3	321817	1092537	15040006	S	860.0	-	-
	D-13-29 24DCC2	4	3	321648	1092020	15040006	U	802.0	-	-
	D-13-29 28BBB1	4	3	321637	1092354	15040006	I	660.0	-	-
	D-13-30 09ACD1	4	3	321857	1091700	15040006	U	900.0	-	-
	D-13-30 24CDD	4	3	321648	1091423	15040006	I	120.0	-	-
	D-13-31 29DDA	4	3	321607	1091141	15040006	H	740.0	-	-
	D-14-31 19BAC	4	3	321210	1091320	15040006	S	1140.0	200.0	-
	D-14-31 22ADC	4	3	321200	1090945	15040006	I	800.0	65.0	-
	D-14-31 25ADC2	4	3	321109	1090737	15040006	I	600.0	-	-
	D-14-31 34ACC	4	3	321016	1090956	15040006	I	1000.0	-	-
	D-15-31 11DCC	4	3	320805	1090850	15040006	I	750.0	205.0	-
	D-16-32 21CCC	4	3	320051	1090506	15040006	I	340.0	-	-
	D-18-32 26BBB	4	3	315012	1090304	0	I	1000.0	-	-
SSW RES	C-14-01 03ADC	4	19	321419	1122120	15080101	S	590.0	440.0	590.0
	C-19-01 36BDA	4	19	314347	1121934	15080101		500.0	300.0	504.0
	D-16-01 18BBD2	4	19	320222	1121856	15080101	H	730.0	584.0	725.0
	D-17-03 24DDB2	4	19	315535	1120059	15080101	P	620.0	571.0	580.0
									592.0	597.0
									604.0	615.0
									571.0	580.0
									592.0	597.0
									604.0	614.0
	D-17-04 34ABD	4	19	315444	1115503	15080101	U	201.0	-	-
	D-17-05 35AAD	4	19	315444	1114740	15080101		827.0	-	-
	D-19-01 07ABD	4	19	314726	1121821	15080101	H	400.0	300.0	400.0
	D-19-03 01ABA	4	19	314823	1115909	15080101	P	715.0	671.0	715.0
	D-20-05 24DDD2	4	19	314000	1114634	15080101	H	677.0	612.0	662.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
STJ	A-11-28 22BDA2	4	1	342024	1092203	15020001	U	550.0	160.0	550.0
	A-11-29 20BAA	4	1	342033	1091741	15020001	U	1550.0	-	-
	A-13-27 15BDC	4	1	343200	1092758	15020002	U	574.0	285.0	-
	A-13-28 27BDC	4	1	343020	1092140	15020002	I	162.0	-	-
	A-13-28 29BCD	4	1	343015	1092348	15020002	H	47.0	-	-
	A-13-29 35AAA	4	1	342946	1091335	15020003	S	327.0	210.0	-
	A-14-27 35BDC	4	1	343439	1092703	15020002	S	156.0	-	-
TON	A-05-11 18AAA	4	7	334653	1111541	15060105	S	-	-	-
	A-06-11 05CAD	4	7	335322	1111507	15060105	U	69.0	-	-
	A-09-10 05AAA	4	7	340932	1112040	15060105	S	-	-	-
	A-09-10 20BAA	4	7	340654	1112112	15060105	S	100.0	-	-
	A-09-10 32BDB	4	7	340458	1112118	15060105	S	-	-	-
	A-10-10 02DDB1	4	7	341405	1111736	-	H	160.0	40.0	160.0
	A-10-10 23DDB	4	7	341128	1111734	-	H	-	-	-
	A-10-10 25BAB	4	7	341116	1111707	-	H	60.0	35.0	40.0
									40.0	60.0
	A-10-10 28BCB	4	7	341059	1112026	-	H	70.0	42.0	70.0
	A-10-10 28BCC	4	7	341053	1112032	-	H	-	-	-
	A-10-10 28BCD	4	7	341055	1112023	-	H	70.0	30.0	55.0
	A-10-10 29ACA	4	7	341[illegible]	1112052	-	U	180.0	40.0	180.0
TUB RES	03 077-07 55X06.55	4	5	360918	1110807	15020018	N	705.0	100.0	705.0
	03 077-13.05X06.81	4	5	360904	1111402	15020018	H	475.0	-	-
	03 077-13.36X06.44	4	5	360924	1111422	15020018	P	442.0	142.0	-
	03 077-13.77X08.52	4	5	360734	1111448	15020018	H	229.0	63.0	229.0
USC	D-10-13 12DDA	4	21	323418	1105654	15050301	S	600.0	460.0	600.0
	D-10-13 25BCC	4	21	323200	1105750	15050301	S	490.0	402.0	485.0
	D-10-14 06DCA	4	21	323512	1105611	15050301	H	470.0	-	-
	D-10-14 17BAA	4	21	323408	1105518	15050301	S	530.0	-	-
	D-10-14 19AAA	4	21	323318	1105553	-	U	775.0	360.0	721.0
									721.0	775.0
	D-10-14 29DCA	4	21	323139	1105508	15050301	S	407.0	322.0	407.0
	D-10-14 35DCC	4	21	323043	1105209	15050301	P	450.0	240.0	440.0
	D-11-13 28AAC	4	19	322658	1110054	15050301	H	-	-	-
	D-11-13 33DCC	4	19	322527	1110110	15050301	U	690.0	590.0	638.0
									635.0	690.0
	D-11-13 34DCB	4	19	322538	1110008	15050301	H	645.0	-	-
	D-11-13 36BBB	4	19	322617	1105835	15050301	U	512.0	-	-
	D-11-14 02BDB	4	19	323026	1105310	15050301	U	-	-	-
	D-11-14 04ABC	4	19	323048	1105504	15050301	P	500.0	-	-
	D-11-14 04BBC1	4	19	323032	1105529	15050301	P	420.0	220.0	415.0
	D-11-14 04CCA	4	19	322957	1105527	15050301	P	400.0	215.0	308.0
	D-11-14 10AAD	4	19	322935	1105334	15050301	P	130.0	-	-
	D-11-14 10CCB	4	19	322905	1105430	15050203	H	350.0	-	-
	D-11-14 21CBD	4	19	322725	1105524	15050301	H	-	-	-
	D-11-14 22BAA	4	19	322758	1105406	15050301	H	200.0	105.0	190.0
	D-11-14 32CCD	4	19	322526	1105623	15050301	H	257.0	-	-
	D-12-12 11BCB	4	19	322420	1110540	15050301	H	-	-	-
	D-12-12 12ABB	4	19	322432	1110415	15050301	H	500.0	400.0	495.0
	D-12-12 13BCB	4	19	322327	1110444	15050301	H	325.0	306.0	340.0
									1.0	325.0
	D-12-12 14DDD	4	19	322253	1110448	15050301	H	360.0	-	-
	D-12-12 15CDD	4	19	322255	1110621	15050301	U	-	-	-
	D-12-12 17DAA	4	19	322317	1110752	15050303	I	661.0	90.0	250.0
									149.0	648.0
									655.0	661.0
	D-12-12 22ADC	4	19	322227	1110559	15050301	I	315.0	-	-
	D-12-12 22DCD	4	19	322200	1110604	15050301	U	-	-	-
	D-12-12 26DBD	4	19	322121	1110507	15050301	I	250.0	70.0	245.0
	D-12-12 33DAD	4	19	322107	1110653	-	H	387.0	-	-
	D-12-12 36BAB2	4	19	322107	1110427	-	I	301.0	95.0	298.0
	D-12-12 36CDC2	4	19	322017	1110430	15050301	I	340.0	84.0	140.0
									140.0	335.0
									338.0	340.0
	D-12-13 02DBD	4	19	322453	1105900	15050301	M	571.0	130.0	570.0
	D-12-13 04BBA	4	19	322524	1110133	15050301	H	650.0	630.0	650.0
	D-12-13 07DDD	4	19	322349	1110247	15050301	P	503.0	300.0	503.0
	D-12-13 08CAD	4	19	32235[illegible]	1110220	15050301	H	506.0	400.0	502.0
	D-12-13 12DAA	4	19	322407	1105741	15050301	U	650.0	215.0	320.0
									340.0	380.0
									395.0	600.0
									620.0	640.0
	D-12-13 13BCB	4	19	322326	1105834	15050301	I	605.0	232.0	598.0
	D-12-13 13DAC	4	19	322307	1105748	15050301	N	470.0	336.0	436.0
									446.0	470.0
	D-12-13 18BCC	4	19	322318	1110345	15050301	P	646.0	320.0	340.0
									380.0	450.0
									450.0	646.0
	D-12-13 22BBB	4	19	322248	1110037	15050301	H	268.0	-	-
	D-12-13 24AAB	4	19	322247	1105754	15050301	U	-	-	-
	D-12-13 25BCD	4	19	322133	1105832	15050301	P	500.0	-	-

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
USC--Cont.	D-12-13 26CCA	4	19	322115	1105930	15050301	U	660.0	308.0	660.0
	D-12-13 28AAD	4	19	322145	1110045	15050301	U	486.0	165.0	484.0
	D-12-13 30DAC	4	19	322123	1110256	15050301	P	317.0	217.0	317.0
	D-12-13 32BCD	4	19	322043	1110240	15050301	U	303.0	-	-
	D-12-13 35AAA	4	19	322106	1105841	15050302	U	-	-	-
	D-12-13 36BCC	4	19	322049	1105837	15050302	U	515.0	-	-
	D-12-14 05BBB	4	19	322522	1105637	15050301	I	400.0	-	-
	D-12-14 05CCD	4	19	322434	1105625	15050301	U	193.0	-	-
	D-13-12 02BBA	4	19	322015	1110532	15050301	P	258.0	-	-
	D-13-12 04DCD	4	19	321929	1110706	15050301	U	172.0	79.0	172.0
	D-13-12 12AAB	4	19	321917	1110353	15050301	U	250.0	39.0	214.0
	D-13-12 12CAA	4	19	321853	1110417	15050301	U	350.0	165.0	347.0
	D-13-12 14DCB	4	19	321749	1110510	15050301	H	405.0	-	-
	D-13-12 25CCC	4	19	321559	1110444	15050301	U	390.0	215.0	380.0
	D-13-13 08BAA	4	19	321920	1110216	15050301	P	330.0	105.0	192.0
	D-13-13 12ACB	4	19	321918	1105759	15050302	U	430.0	-	-
	D-13-13 13BBA	4	19	321830	1105832	15050302	P	242.0	-	-
	D-13-13 14ABA	4	19	321825	1105902	15050302	P	650.0	-	-
	D-13-13 14DCA	4	19	321747	1105859	15050302	P	400.0	-	-
	D-13-13 15DAC	4	19	321755	1105952	15050302	P	820.0	-	-
	D-13-13 16AAA	4	19	321829	1110044	15050302	I	295.0	128.0	295.0
	D-13-13 17AAA	4	19	321828	1110144	15050302	P	490.0	108.0	215.0
	D-13-13 18CBB	4	19	321801	1110342	15050301	U	-	-	-
	D-13-13 19CDC	4	19	321650	1110322	15050301	P	450.0	190.0	445.0
	D-13-13 21BAA	4	19	321736	1110115	15050301	P	303.0	120.0	297.0
	D-13-13 26BAD2	4	19	321638	1105910	15050302	P	500.0	72.0	480.0
	D-13-13 27CDD2	4	19	321557	1110013	15050301	I	303.0	150.0 302.0	300.0 303.0
	D-13-13 30BCC	4	19	321626	1110337	15050301	P	395.0	251.0	390.0
	D-13-13 32CCC	4	19	321507	1110240	15050301	U	302.0	-	-
	D-13-13 33DAC	4	19	321517	1110050	15050301	H	175.0	35.0	175.0
	D-13-13 34CDC	4	19	321505	1110026	15050301	P	468.0	72.0	172.0
	D-13-13 35ADB	4	19	321537	1105850	15050301	P	760.0	-	-
	D-13-13 36BBA	4	19	321550	1105827	15050302	P	1020.0	120.0 540.0	530.0 1020.0
	D-13-13 36DDC	4	19	321504	1105750	15050302	P	375.0	103.0 370.0	350.0 375.0
	D-13-14 19BBB1	4	19	321735	1105733	15050203	U	238.0	80.0	235.0
	D-13-14 20BDA	4	19	321721	1105610	15050302	U	160.0	-	-
	D-13-14 21CDC2	4	19	321650	1105512	-	U	-	-	-
	D-13-14 22DCD	4	19	321650	1105405	15050302	U	60.0	-	-
	D-13-14 25CAD	4	19	321613	1105158	15050302	U	-	-	-
	D-13-14 26CCD1	4	19	321555	1105319	15050302	I	190.0	40.0	185.0
	D-13-14 26DDC	4	19	321558	1105239	-	I	-	-	-
	D-13-14 30BBD	4	19	321635	1105726	15050302	P	420.0	93.0 153.0 411.0	208.0 411.0 420.0
	D-13-14 30CCC1	4	19	321556	1105734	15050302	U	200.0	75.0	195.0
	D-13-14 31BDC2	4	19	321530	1105718	15050302	P	500.0	150.0	480.0
	D-13-14 32BBA	4	19	321549	1105622	15050302	U	550.0	120.0	438.0
	D-13-14 32DCA1	4	19	321511	1105554	15050302	P	245.0	-	-
	D-13-14 34AAA1	4	19	321555	1105334	-	I	135.0	40.0	130.0
	D-13-14 34ABB	4	19	321549	1105356	15050302	U	470.0	120.0	470.0
	D-13-14 35ADD	4	19	321530	1105235	15050302	P	600.0	0. 324.0	324.0 376.0
	D-13-14 36CCD	4	19	321504	1105216	15050302	U	302.0	110.0	302.0
	D-13-15 08ADC	4	19	321901	1104935	15050302	U	405.0	-	-
	D-13-15 20ABC2	4	19	321729	1104951	15050302	H	170.0	-	-
	D-13-15 21ABB	4	19	321734	1104850	15050302	P	353.0	335.0	353.0
	D-13-15 22CDC	4	19	321648	1104804	15050302	P	237.0	35.0	233.0
	D-13-15 27DDC	4	19	321554	1104734	15050302	U	174.0	-	-
	D-13-15 29CCA	4	19	321605	1105014	15050302	P	418.0	100.0 295.0	302.0 418.0
	D-13-15 30AAD	4	19	321639	1105028	15050302	H	260.0	53.0	240.0
	D-13-15 30DDC	4	19	321557	1105034	15050302	U	215.0	-	-
	D-13-15 31DDC	4	19	321506	1105036	15050302	P	402.0	110.0	245.0
	D-13-15 32DDA	4	19	321514	1104931	15050302	U	-	-	-
	D-13-15 33CBB	4	19	321523	1104918	15050302	U	-	0.	16.0
	D-13-15 34AAC	4	19	321545	1104736	15050302	U	185.0	89.0	185.0
	D-13-15 35DDC	4	1	321504	1104625	15050302	P	270.0	60.0	265.0
	D-13-16 29ADD2	4	19	321624	1104318	15050302	H	200.0	-	-
	D-13-16 29CCD	4	19	321600	1104402	15050302	U	402.0	-	-
	D-13-16 33BDD	4	19	321532	1104247	15050302	H	827.0	-	-
	D-13-16 34CBB	4	19	321528	1104205	15050302	H	240.0	235.0	240.0
	D-13-16 35DAC	4	19	321518	1104019	15050302	H	120.0	27.0	115.0
	D-14-13 01DAB2	4	19	321431	1105748	15050301	P	-	-	-
	D-14-13 03CAC	4	19	321428	1110022	15050301	P	570.0	-	-
	D-14-13 08CDA	4	19	321328	1110214	15050301	U	-	-	-
	D-14-13 11BAB	4	19	321400	1105921	15050302	U	250.0	160.0	250.0
	D-14-13 12DCA	4	19	321332	1105803	15050301		500.0	86.0	480.0
	D-14-13 13CBC	4	19	321241	1105832	15050301	P	274.0	50.0 200.0	190.0 274.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
USC--Cont.	D-14-13 24DAA	4	19	321157	1105740	15050301	U	800.0	240.0 550.0 60.0	585.0 800.0 500.0
	D-14-13 26BBC3	4	19	321126	1105932	15050301	U	124.0	-	-
	D-14-13 27ADD2	4	19	321110	1105942	15050301	P	203.0	-	-
	D-14-13 35CDB	4	19	320957	1105918	15050301	U	168.0	-	-
	D-14-13 36BAD	4	19	321026	1105810	15050301	P	529.0	-	-
	D-14-13 36DCD	4	19	320949	1105755	15050301	H	270.0	-	-
	D-14-14 02BDB	4	19	321443	1105313	15050203		325.0	120.0	270.0
	D-14-14 02DCA1	4	19	321422	1105246	15050302	P	600.0	200.0 585.0	585.0 600.0
	D-14-14 04DAC2	4	19	321426	1105446	15050301	P	800.0	207.0	780.0
	D-14-14 05ADB1	4	19	321447	1105549	15050302	U	453.0	-	-
	D-14-14 07AAA	4	19	321406	1105639	15050301	U	302.0	115.0 293.0	249.0 508.0
	D-14-14 07DDA2	4	19	321324	1105636	-	P	905.0	246.0 410.0 460.0 485.0 530.0 550.0	296.0 450.0 470.0 495.0 550.0 905.0
	D-14-14 10ACD	4	19	321324	1105349	15050302	U	334.0	140.0	330.0
	D-14-14 12AAC1	4	19	321359	1105139	15050301	U	596.0	130.0 596.0	350.0 600.0
	D-14-14 12BDC1	4	19	321346	1105210	15050302	U	506.0	-	-
	D-14-14 14CAA	4	19	321248	1105304	15050301	U	463.0	135.0 300.0	300.0 302.0
	D-14-14 16CCC PZ1	4	19	321229	1105532	15050301	U	1340.0	1300.0	1310.0
	D-14-14 16CCC PZ2	4	19	321229	1105532	15050301	U	1280.0	1040.0	1040.0
	D-14-14 16CCC PZ3	4	19	321229	1105532	15050301	U	914.0	500.0	504.0
	D-14-14 16CCC PZ4	4	19	321229	1105532	15050301	U	436.0	228.0	232.0
	D-14-14 20DAC2	4	19	321148	1105545	15050301	N	355.0	-	-
	D-14-14 21BCC	4	19	321202	1105530	15050301	P	434.0	0. 154.0 279.0	154.0 284.0 434.0
	D-14-14 22CBA1	4	19	321153	1105422	15050301	U	314.0	-	-
	D-14-14 22DBC	4	19	321149	1105358	15050301	P	820.0	152.0	400.0
	D-14-14 24CDD	4	19	321134	1105159	15050301	P	850.0	246.0 762.0	682 0 850.0
	D-14-14 28DAB	4	19	321103	1105444	15050301	P	504.0	174.0	418.0
	D-14-14 30ABD	4	19	321123	1105653	-	H	225.0	-	-
	D-14-14 32CDB	4	19	320957	1105617	15050301	H	250.0	130.0 240.0	240.0 250.0
	D-14-14 36AAD	4	19	321032	1105130	15050301	P	750.0	340.0 739.0	685.0 744.0
	D-14-15 01BDB	4	19	321440	1104558	15050302	S	145.0	-	-
	D-14-15 02DDA1	4	19	321418	1104620	15050302	U	490.0	-	-
	D-14-15 03DDC	4	19	321409	1104736	15050302	P	350.0	-	-
	D-14-15 04DAD	4	19	321424	1104823	15050302	P	500.0	-	-
	D-14-15 05DAA	4	19	321431	1104927	15050302	P	397.0	85.0	397.0
	D-14-15 05DBA	4	19	321430	1104945	15050302	P	420.0	220.0	420.0
	D-14-15 06BBB2	4	19	321455	1105119	-	P	542.0	261.0	537.0
	D-14-15 07BDB	4	19	321353	1105105	15050302	P	371.0	0. 357.0	357.0 505.0
	D-14-15 08CBD	4	19	321334	1105012	15050302	P	460.0	-	-
	D-14-15 09ADA	4	19	321349	1104826	15050302	P	602.0	365.0	380.0
	D-14-15 09BDD	4	19	321344	1104902	15050302	P	450.0	-	-
	D-14-15 09DCC1	4	19	321321	1104847	15050302	U	426.0	-	-
	D-14-15 10AAC2	4	19	321353	1104735	15050302	P	495.0	153.0	495.0
	D-14-15 10CCC	4	19	321319	1104818	15050302	U	502.0	-	-
	D-14-15 12CBD	4	19	321332	1104609	15050302	H	300.0	-	-
	D-14-15 14DAB1	4	19	321242	1104633	15050302	U	409.0	270.0	405.0
	D-14-15 15BAC	4	19	321311	1104804	15050302	P	760.0	212.0	495.0
	D-14-15 16ACA	4	19	321259	1104843	15050302	P	450.0	185.0	450.0
	D-14-15 16CDB	4	19	321236	1104905	15050302	U	422.0	-	-
	D-14-15 17CAA	4	19	321247	1104955	15050302	P	702.0	-	-
	D-14-15 21DAD	4	19	321150	1104823	15050302	P	1000.0	510.0 778.0 1000.0	826.0 1000.0 1000.0
	D-14-15 23CBC	4	19	321146	1104718	15050302	P	840.0	-	-
	D-14-15 26CBC	4	19	321053	1104719	15050302	P	750.0	300.0	750.0
	D-14-15 28CBA	4	19	321103	1104914	15050302	U	454.0	-	-
	D-14-15 28DDD	4	19	321040	1104825	15050302	U	687.0	-	-
	D-14-15 29CBB	4	19	321103	1105024	15050302	U	697.0	718.0	750.0
	D-14-16 04CCA2	4	19	321416	1104305	15050302	H	56.0	17.0	55.0
	D-14-16 06DBC	4	19	321423	1104443	15050302	U	-	-	-
	D-14-16 07CCC	4	19	321327	1104510	15050302		360.0	-	-
	D-14-16 09AAB	4	19	321404	1104222	15050302	H	70.0	25.0 60.0	60.0 70.0
	D-14-16 31BBC2	4	19	321025	1104517	15050302	R	500.0	300.0 400.0 420.0 445.0	375.0 415.0 440.0 497.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
USC-- Cont.	D-15-13 01ACC	4	19	320923	1105806	15050301	U	226.0	-	-
	D-15-13 01BCB	4	19	320932	1105834	15050301	P	500.0	235.0	300.0
	D-15-13 02AAA1	4	19	320944	1105839	-	Z	400.0	300.0	400.0
	D-15-13 02BBA1	4	19	320947	1105926	15050301	P	182.0	-	-
	D-15-13 05ABD	4	19	320933	1110159	15050301	U	-	-	-
	D-15-13 10DAC	4	19	320815	1105953	15050301	I	230.0	-	-
	D-15-13 11AAD2	4	19	320846	1105838	-	Z	141.0	121.0	141.0
	D-15-13 11CBA	4	19	320824	1105930	15050301	U	281.0	156.0	224.0 281.0
	D-15-13 12ACC1	4	19	320835	1105805	-	Z	401.0	360.0	400.0
	D-15-13 12CBB	4	19	320819	1105836	-	Z	175.0	95.0	175.0
	D-15-13 13DBD1	4	19	320728	1105800	-	Z	406.0	300.0	400.0
	D-15-13 13DCB	4	19	320720	1105808	15050301	U	150.0	-	-
	D-15-13 14CDD1	4	19	320716	1105908	15050301	H	-	-	-
	D-15-13 14CDD2	4	19	320713	1105912	15050301	H	-	-	-
	D-15-13 15DBB	4	19	320732	1110007	15050301	I	263.0	50.0 170.0	170.0 263.0
	D-15-13 21CAD	4	19	320631	1110117	-	H	135.0	-	-
	D-15-14 03DAD	4	19	320910	1105330	15050301	E	2500.0	800.0 1000.0 1800.0	1000.0 1800.0 2500.0
	D-15-14 04CAB2	4	19	320919	1105513	15050301	H	278.0	180.0	278.0
	D-15-14 06CAA	4	19	320916	1105707	15050301	H	467.0	87.0 500.0	501.0 1020.0
	D-15-14 07CAB2	4	19	320823	1105719	15050301	H	225.0	-	-
	D-15-14 07CBC	4	19	320818	1105728	15050203	U	370.0	-	-
	D-15-14 07CCD1	4	19	320804	1105724	-	Z	372.0	332.0	372.0
	D-15-14 08DAB	4	19	320827	1105544	15050301	H	-	-	-
	D-15-14 10DCD1	4	19	320806	1105344	15050301	P	450.0	177.0	-
	D-15-14 13BBA	4	19	320800	1105215	15050301	P	400.0	220.0	-
	D-15-14 18ABB	4	19	320758	1105701	15050301	H	402.0	-	-
	D-15-14 18CBC2	4	19	320729	1105736	-	Z	128.0	108.0	128.0
	D-15-14 19BBB	4	19	320708	1105736	-	Z	190.0	150.0	190.0
	D-15-14 19CCC	4	19	320618	1105734	15050301	P	620.0	114.0	338.0
	D-15-14 25BAA	4	19	320612	1105203	15050301	H	300.0	240.0	295.0
	D-15-14 27CBC	4	19	320540	1105429	15050301	N	300.0	-	-
	D-15-14 31BBB	4	19	320522	1105733	15050301	P	556.0	-	-
	D-15-14 31BCB	4	19	320507	1105734	15050301	P	553.0	120.0 550.0	548.0 553.0
	D-15-14 34BBC	4	19	320516	1105423	15050301	N	450.0	443.0	450.0
	D-15-15 04BBA	4	19	320942	1104911	15050302	U	1310.0	391.0 1240.0	1240.0 1310.0
	D-15-15 06BBB	4	19	320941	1105125	15050301	P	492.0	270.0	489.0
	D-15-15 06DCA	4	19	320904	1105042	15050301	U	407.0	260.0	405.0
	D-15-15 15CAA	4	19	320731	1104752	15050302	H	426.0	-	-
	D-15-15 16CBB PZ1	4	19	320732	1104922	15050301	U	600.0	466.0	470.0
	D-15-15 16CBB PZ2	4	19	320732	1104922	15050301	U	1450.0	670.0	674.0
	D-15-15 16CBB PZ3	4	19	320732	1104922	15050301	U	1840.0	1480.0	1480.0
	D-15-15 29DAC	4	19	320540	1104938	15050301	P	410.0	300.0	410.0
	D-15-15 30BBA	4	19	320617	1105116	15050301	U	-	-	-
	D-15-15 36CDC	4	19	320438	1104559	15060103	C	905.0	535.0	900.0
	D-15-16 05CBA	4	19	320917	1104403	15050302	H	330.0	245.0	325.0
	D-15-16 06CDA	4	19	320903	1104447	15050302	H	245.0	125.0	240.0
	D-15-16 07AAD	4	19	320841	1104424	15050203	H	189.0	-	-
	D-15-16 11ADA	4	19	320835	1104012	15030302	S	-	-	-
	D-15-16 15DDD	4	19	320712	1104113	15050302	H	200.0	-	-
	D-15-16 29ADD	4	19	320556	1104318	15050302	H	500.0	290.0	500.0
	D-15-16 36BAD	4	19	320512	1103943	15050302	S	188.0	80.0	180.0
	D-15-17 10CAD	4	19	320817	1103538	15050302	U	102.0	25.0	100.0
	D-15-17 16ACC	4	19	320737	1103628	15050302	P	280.0	68.0	260.0
	D-15-17 17BBA	4	19	320754	1103800	15050302	S	-	-	-
	D-15-17 21BDD	4	19	320644	1103642	15050302	H	350.0	20.0	350.0
	D-16-13 34AAB2	4	19	315958	1105952	15050301	N	935.0	494.0 660.0	681.0 933.0
	D-16-13 36DDD	4	19	315912	1105739	15050301	U	975.0	240.0	975.0
	D-16-14 07CCD	4	19	320243	1105722	15050301	U	230.0	-	-
	D-16-14 17BCC	4	19	320218	1105637	15050301	P	360.0	120.0	345.0
	D-16-14 17DAD	4	19	320203	1105540	15050301		466.0	160.0 260.0 460.0	335.0 460.0 503.0
	D-16-14 19BBA1	4	19	320147	1105728	15050301	U	251.0	68.0	250.0
	D-16-14 20CCC	4	19	320101	1105632	15050301	U	447.0	70.0	315.0
	D-16-14 21CCB	4	19	320106	1105534	15050301	P	600.0	-	-
	D-16-14 25AAA	4	19	320054	1105132	15050301	P	885.0	410.0 470.0 710.0	450.0 550.0 790.0
	D-16-14 25BBB	4	19	320057	1105229	15050301	P	2500.0	250.0 850.0	850.0 2500.0
	D-16-14 31AAD	4	19	315950	1105642	15050301	U	475.0	85.0	327.0
	D-16-14 33BDD	4	19	315953	1104900	15050301	U	826.0	-	-
	D-16-14N04CDD	4	19	320430	1105508	15050301	P	540.0	150.0 500.0 800.0	500.0 640.0 1790.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
USC-- Cont.	D-16-14N06CCD	4	19	320432	1105730	15050301	P	550.0	150.0	530.0
	D-16-14S05DDB	4	19	320344	1105549	15050301	H	-	-	-
	D-16-14S06CBA	4	19	320402	1105727	15050301	P	551.0	90.0	548.0
	D-16-15 01DBC	4	19	320402	1104548	15050301	P	600.0	440.0	590.0
	D-16-15 04DAC	4	19	320400	1104839	15050301	N	510.0	365.0	490.0
	D-16-15 05CBC PZ1	4	19	320402	1105028	15050301	U	327.0	318.0	320.0
	D-16-15 05CBC PZ2	4	19	320402	1105028	15050301	U	558.0	536.0	540.0
	D-16-15 05CBC PZ3	4	19	320402	1105028	15050301	U	990.0	954.0	958.0
	D-16-15 09BBB	4	19	320345	1104926	15050301	U	1000.0	350.0 500.0	500.0 1000.0
	D-16-15 14ACB	4	19	320238	1104654	15050301	C	905.0	445.0	900.0
	D-16-15 34AAA	4	19	320016	1104729	15050301	P	703.0	242.0	-
	D-16-16 08AAB	4	19	320345	1104333	15050302	U	924.0	551.0	914.0
	D-16-16 09DCD2	4	19	320253	1104237	-	T	759.0	-	-
	D-16-16 10ACA	4	19	320328	1104135	15050302	U	856.0	530.0 840.0	840.0 856.0
	D-16-16 10DCB2	4	19	320302	1104147	15050302	U	769.0	548.0 760.0	760.0 769.0
	D-16-16 11ACC	4	19	320323	1104041	15050302	H	750.0	85.0	805.0
	D-16-16 15CBB	4	19	320225	1104214	15050302	P	604.0	350.0 396.0	386.0 604.0
	D-16-16 21BDC	4	19	320141	1104300	15050301	U	629.0	623.0	629.0
	D-16-16 36ABC	4	19	320010	1103944	15050302	S	-	-	-
	D-16-16 36CAB	4	19	315950	1103957	15050302	U	-	-	-
	D-16-17 08CBD	4	19	320308	1103807	15050302	H	155.0	50.0	155.0
	D-16-17 16ADD	4	19	320231	1103618	15050302	U	700.0	20.0	700.0
	D-16-17 33ABB	4	19	320014	1103639	15050302	U	-	-	-
	D-16-18 36CDA	4	19	315941	1102738	15050302	S	-	-	-
	D-17-12 11CAB1	4	19	315751	1110532	15050301	H	-	-	-
	D-17-12 25CBD	4	19	315513	1110434	15050301	S	350.0	-	-
	D-17-12 26BCC	4	19	315530	1110544	15050301	S	185.0	65.0 170.0	170.0 180.0
	D-17-13 01ABB	4	19	315908	1105802	15050301	U	980.0	273.0	970.0
	D-17-13 01CAB	4	19	315847	1105822	-	U	306.0	110.0	298.0
	D-17-13 13ABB	4	19	315728	1105807	15050301	I	1250.0	290.0 895.0	895.0 1250.0
	D-17-13 13ADB	4	19	315711	1105754	15050301	U	312.0	48.0	312.0
	D-17-13 22AAA	4	19	315632	1105945	15050301	H	447.0	345.0	445.0
	D-17-13 24ACC1	4	19	315610	1105808	15050301	U	254.0	71.0	254.0
	D-17-13 25ABB	4	19	315539	1105802	15050301	U	320.0	70.0	320.0
	D-17-13 25CAB	4	19	315516	1105823	-	U	320.0	70.0	320.0
	D-17-13 36BCC	4	19	315427	1105833	15050301	U	254.0	50.0	-
	D-17-14 01BAA	4	19	315909	1105202	15050301	U	1540.0	-	-
	D-17-14 04ACA	4	19	315857	1105455	15050301	U	718.0	175.0	603.0
	D-17-14 04BCB	4	19	315855	1105531	15050301	P	583.0	196.0	504.0
	D-17-14 07ADB	4	19	315812	1105653	15050301	I	1200.0	150.0 150.0 801.0	500.0 801.0 1200.0
	D-17-14 07CCC	4	19	315728	1105642	15050301	I	1620.0	278.0 458.0 983.0 1440.0	458.0 983.0 1440.0 1620.0
	D-17-14 07DDD	4	19	315728	1105639	15050301	I	1500.0	150.0 700.0 1500.0	728.0 720.0 1500.0 1500.0
	D-17-14 08BDD2	4	19	315754	1105607	15050301	I	506.0	100.0	506.0
	D-17-14 18ADC	4	19	315702	1105650	15050301	I	1520.0	100.0 607.0 1220.0	607.0 1220.0 1520.0
	D-17-14 19ABC	4	19	315632	1105706	15050301	U	360.0	70.0 259.0	258.0 360.0
	D-17-14 21ACD	4	19	315511	1105452	15050301	I	230.0	-	-
	D-17-14 30ACA	4	19	315526	1105655	15050301	I	2440.0	-	-
	D-17-14 30BCC	4	19	315515	1105734	15050301	I	700.0	-	-
	D-17-15 02DCD	4	19	315840	1104643	15050301	U	849.0	550.0	849.0
	D-17-15 13BDD	4	19	315724	1104554	15050301	U	947.0	-	-
	D-17-16 10AAA	4	19	315837	1104115	15050301	U	825.0	220.0 280.0 480.0	240.0 300.0 825.0
	D-17-16 14BBD	4	19	315734	1104103	15050301	U	-	-	-
	D-17-16 26CCA	4	19	315518	1104107	15050301	U	-	-	-
	D-17-16 35BBA	4	19	315507	1104059	15050301	U	-	-	-
	D-17-17 10ADD	4	19	315810	1103516	15050302	S	480.0	300.0	480.0
	D-17-17 23BDC	4	19	315628	1103452	15050302	S	-	-	-
	D-17-17 25BBA	4	19	315558	1103359	15050302	S	-	-	-
	D-17-17 34ADB	4	19	315453	1103523	15050302	S	-	-	-
	D-17-18 09ACC	4	19	315815	1103035	15050302	H	585.0	110.0	575.0
	D-17-18 09BCC	4	19	315816	1103106	15050302	S	-	-	-
	D-17-18 13ABD	4	19	315737	1102723	15050302	U	-	-	-
	D-17-18 13DDD	4	19	315656	1102707	15050302	H	434.0	-	-
	D-17-18 17BDB	4	19	315732	1103147	15050302	I	300.0	50.0 110.0	100.0 300.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
USC-- Cont.	D-17-19 07CAA2	4	3	315607	1102636	15050302	U	404.0	-	-
	D-17-19 29BBA	4	3	315558	1102552	15050302	S	-	-	-
	D-17-19 29BDD	4	3	315538	1102534	15050202	S	216.0		-
	D-17-19 29CDA	4	3	315517	1102534	15050202	U	190.0	-	-
	D-18-13 01CDA	4	19	315313	1105808	15050301	U	253.0	-	-
	D-18-13 10DCD	4	19	315215	1105958	15050301	N	1050.0	312.0 1050.0	1040.0 1050.0
	D-18-13 12CDB UNSURV	4	19	315221	1105818	15050301	I	251.0	57.0	251.0
	D-18-13 13AAC UNSURV	4	19	315200	1105749	15050301	I	1100.0	400.0 525.0 990.0	550.0 1000.0 1100.0
	D-18-13 13BAC	4	19	315202	1105815	15050301	U	304.0	-	-
	D-18-13 16BBB	4	19	315209	1110136	15050301	U	520.0	420.0	480.0
	D-18-13 18CAC	4	19	315133	1110323	15050301	U	-	-	-
	D-18-13 21BCC1	4	19	315055	1110136	15050301	U	640.0	340.0	640.0
	D-18-13 22ACA	4	19	315102	1105954	15050301	P	502.0	182.0 500.0	500.0 502.0
	D-18-13 23BAD UNSURV	4	19	315109	1105908	15050301	I	1170.0	234.0 469.0	469.0 1170.0
	D-18-13 24BCB1	4	19	315105	1105835	15050301	I	360.0	42.0	- 309.0
	D-18-13 26BBD UNSURV	4	19	315015	1105924	15050302	I	395.0		-
	D-18-13 26CCD UNSURV	4	19	314937	1105926	15050301	I	250.0	42.0	-
	D-18-13 27ADA2UNSURV	4	19	315006	1105938	15050301	I	1300.0	157.0 799.0	799.0 1300.0
	D-18-13 35CBB2UNSURV	4	19	314906	1105926	15050301	I	1000.0	160.0 605.0	605.0 1000.0
	D-18-14 06DBA	4	19	315330	1105659	15050301	U	2000.0	501.0 698.0 1670.0	694.0 1690.0 2000.0
	D-18-14 08ADD	4	19	315245	1105535	15050301	U	565.0	248.0 505.0	505.0 565.0
	D-18-15 22ABC	4	19	315130	1104752	15050301	H	110.0	-	-
	D-18-15 33ADA	4	19	314948	1104830	15050301	H	510.0	-	-
	D-18-16 21DDC	4	19	315048	1104235	15050302	U	-	-	-
	D-18-16 22DBC	4	19	315103	1104146	15050302	U	-	-	-
	D-18-16 24BDC1	4	19	315118	1103957	15050302	S	22.0	-	-
	D-18-16 32CCB	4	19	314913	1104412	15050302	U	-	-	-
	D-18-16 34BDA	4	19	314943	1104145	15050302	U	-	-	-
	D-18-17 02AAC	4	19	315402	1103424	15050302	S	-	-	-
	D-18-17 32DBA	4	19	314926	1103735	15050302	S	226.0	-	-
	D-18-17 33ADA	4	19	314937	1103623	15050302	S	-	-	-
	D-18-17 36CBC	4	19	314918	1103407	15050302	S	180.0	-	-
	D-18-18 19ABB	4	19	315137	1103233	15050302	S	240.0	-	-
	D-18-18 20DAD2	4	19	315102	1103113	15050302	S	-	-	-
	D-18-18 29ACC	4	19	315022	1103134	15050302	S	-	-	-
	D-18-18 31CAC	4	19	314923	1103253	15050302	S	230.0	-	-
	D-19-11 11CAC	4	19	314716	1111131	15050301	S	-	-	-
	D-19-11 16CBA	4	19	314632	1111344	15050301	S	93.0	-	-
	D-19-11 23CCB	4	19	314526	1111149	15050301	S	-	-	-
	D-19-11 25AAA1	4	19	314515	1110950	15050301	S	-	-	-
	D-19-12 36ADA	4	19	314408	1110347	15050301	I	-	-	-
	D-19-12 36CAD	4	19	314347	1110411	15050301	T	400.0	159.0	400.0
	D-19-12 36DDA	4	19	314341	1110342	15050301	P	157.0	-	-
	D-19-13 03ABA UNSURV	4	19	314841	1105947	15050301	U	-	-	-
	D-19-13 03ADC UNSURV	4	19	314821	1105945	15050301	I	1200.0	74.0 193.0 800.0	135.0 800.0 1200.0
	D-19-13 05ACA1	4	19	314828	1110157	15050301	S	250.0	-	-
	D-19-13 09CAA	4	19	314728	1110111	15050301	I	-	-	-
	D-19-13 21BAA	4	19	314606	1110113	15050301	S	189.0	-	-
	D-19-13 29DDB	4	19	314436	1110150	15050301	S	410.0	65.0	405.0
	D-19-13 31BDC	4	19	314401	1110318	15050301	H	-	-	-
	D-19-13 31DCC	4	19	314334	1110306	15050301	H	175.0	-	-
	D-19-14 13DCA	4	19	314622	1105140	15050301	S	-	-	-
	D-19-14 14DCA	4	19	314622	1105244	15050301	S	900.0	-	-
	D-19-14 14DCB	4	19	314624	1105245	15050301	U	-	-	-
	D-19-14 27CDA2	4	19	314436	1105357	-	H	50.0	25.0	49.0
	D-19-15 20DDB	4	19	314549	1104938	15050301	S	16.0	-	-
	D-19-16 02CCD	4	19	314819	1104104	15050302	S	285.0	-	-
	D-19-16 04DBD	4	19	314834	1104237	15050302	U	700.0	-	-
	D-19-16 08AAA	4	19	314812	1104326	15050302	S	554.0	-	-
	D-19-16 10CCA	4	19	314733	1104207	15050302	S	386.0	-	-
	D-19-16 11BBB	4	19	314814	1104118	15050302	U	1510.0	90.0 490.0	490.0 1510.0
	D-19-16 14BDD	4	19	314657	1104054	15050302	S	-	-	-
	D-19-16 16DDB	4	19	314638	1104234	15050302	S	260.0	-	-
	D-19-16 21ACC	4	19	314604	1104247	15050302	H	510.0	-	-
	D-19-16 24CDA	4	19	314544	1103954	15050302	S	203.0	-	-
	D-19-16 26BAD	4	19	314528	1104052	15050302	S	256.0	-	-
	D-19-16 27BAC	4	19	314530	1104202	15050302	S	336.0	-	-
	D-19-16 35DAD	4	19	314410	1104021	15050302	S	143.0	-	-

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
USC-- Cont.	D-19-17 01CCD	4	19	314814	1103403	15050302	S	1290.0	100.0 500.0	500.0 1290.0
	D-19-17 03DDD	4	19	314814	1103517	15050302	U	-	-	-
	D-19-17 09ABB	4	19	314808	1103639	15050302	U	1280.0	100.0 500.0	500.0 1280.0
	D-19-17 10BCD	4	19	314756	1103606	15050302	U	1250.0	243.0 1250.0	1250.0 1250.0
	D-19-17 12AAB	4	19	314807	1103323	15050302	U	-	-	-
	D-19-17 14ADD	4	19	314658	1103414	15050302	S	-	-	-
	D-19-17 15BCC	4	19	314704	1103603	15050302	U	-	-	-
	D-19-17 32ABD	4	19	314435	1103737	15050302	H	1160.0	250.0 990.0	980.0 1160.0
	D-19-17 36CBA	4	19	314413	1103404	15050302	S	240.0	-	-
	D-19-18 17BAD	4	19	314713	1103149	15050302	S	-	-	-
	D-20-11 02DAC	4	19	314255	1111102	15050301	S	-	-	-
	D-20-11 20DDB	4	19	314013	1111407	15050301	H	-	-	-
	D-20-11 21DAA	4	19	314024	1111253	15050301	H	-	-	-
	D-20-11 22ABC	4	19	314044	1111218	15050301	I	450.0	55.0	450.0
	D-20-11 27BBA	4	19	314004	1111240	15050301	S	450.0	-	-
	D-20-11 28CAC	4	19	313927	1111336	15050301	H	200.0	90.0	200.0
	D-20-12 03DBC	4	23	314300	1110609	15050301	H	247.0	151.0 234.0	234.0 247.0
	D-20-12 05AAD1	4	23	314323	1110753	15050301	H	-	-	-
	D-20-12 05CBB	4	23	314304	1110843	15050301	I	400.0	-	-
	D-20-12 10DDC	4	23	314148	1110551	15050301	S	-	-	-
	D-20-12 12DAD	4	23	314202	1110340	15050301	H	160.0	60.0	150.0
	D-20-12 17ACC	4	23	314122	1110510	15050301	S	450.0	300.0	450.0
	D-20-12 19DCB	4	23	314014	1110939	15050301	S	-	-	-
	D-20-12 36ADB	4	23	313856	1110344		H	250.0	110.0	235.0
	D-20-13 06ACC	4	23	314312	1110306	15050301	I	125.0	38.0	125.0
	D-20-13 06CBA	4	23	314303	1110328	15050301	I	197.0	30.0	-
	D-20-13 06DDC	4	23	314242	1110252	15050301	I	-	-	-
	D-20-13 09DDD	4	23	314157	1110037	15050301	S	-	-	-
	D-20-13 25CAB	4	23	313932	1105813	15050301	S	-	-	-
	D-20-13 31AAC	4	23	313902	1110244	15050301	I	-	-	-
	D-20-13 36ACD	4	23	313847	1105752	15050301	S	-	-	-
	D-20-13 36CCD	4	23	313822	1105823	15050301	S	300.0	-	-
	D-20-14 29CAA	4	23	313943	1105600	15050301	S	200.0	-	-
	D-20-16 12DDA	4	23	314220	1103920	15050302	S	210.0	-	-
	D-20-16 24DAD2	4	23	314041	1103820	15050302	H	341.0	-	-
	D-20-16 26AAB	4	23	314024	1104019	15050301	H	187.0	167.0	187.0
	D-20-16 27AAC1	4	23	314014	1104125	15050301	S	-	-	-
	D-20-16 28ABC	4	23	314014	1104244	15050301	S	75.0	-	-
	D-20-17 04AAC	4	23	314349	1103628	15050302	U	700.0	200.0 700.0	700.0 1500.0
	D-20-17 07ADD	4	23	314234	1103810	15050302	U	-	-	-
	D-20-17 10DAB	4	23	314232	1103524	15050302	S	139.0	-	-
	D-20-17 15CDC	4	23	314118	1103670	15050302	S	200.0	-	-
	D-20-17 16DCA	4	23	314129	1103614	15050302	U	194.0	-	-
	D-20-17 19ACC	4	23	314053	1103844	15050302	S	250.0	-	-
	D-20-17 22CBA	4	23	314044	1103506	15050302	S	300.0	-	-
	D-20-17 29BDB	4	23	314011	1103801	15050302	U	-	-	-
	D-20-17 32BAA	4	23	313927	1103751	15050302	U	-	-	-
	D-21-11 05DDC	4	19	313726	1111407	15050301	S	300.0	60.0	280.0
	D-21-12 12DAA	4	23	313654	1110444	15050301	H	145.0	-	-
	D-21-12 13ADA	4	23	313617	1110440	15050301	H	-	-	-
	D-21-13 01CAC	4	23	313741	1105910	15050301	S	140.0	-	-
	D-21-13 05DAA	4	23	313748	1110143	15050301	S	120.0	-	-
	D-21-13 07ACD	4	23	313702	1110254	15050301	I	-	-	-
	D-21-13 17ACC1UNSURV	4	23	313609	1110159	15050301	S	60.0	20.0	60.0
	D-21-13 18CDB	4	23	313553	1110318	15050301	H	-	-	-
	D-21-13 19DBC	4	23	313506	1110307	15050301	H	100.0	-	-
	D-21-13 29CBCUNSURV	4	23	313411	1110230	15050301	I	77.0	7.0	77.0
	D-21-13 30BAC	4	23	313439	1110322	15050301	H	-	-	-
	D-21-13 30DBCUNSURV	4	23	313411	1110400	15050301	U	-	-	-
	D-21-14 08CAA	4	23	313706	1105604	15050301	U	-	-	-
	D-21-16 05CDB	4	23	313758	1104410	15050301	S	-	-	-
	D-21-16 08ADD	4	23	313727	1104330	15050301	S	-	-	-
	D-21-16 09ABA	4	23	313748	1104245	15050301	H	276.0	84.0	276.0
	D-22-12 03AAA	4	23	313302	1110545	15050301	S	-	-	-
	D-22-13 05BBB UNSURV	4	23	313301	1110232	15050301	I	20.0	-	-
	D-22-13 16DC3 UNSURV	4	23	313031	1110055	15050301	I	150.0	-	-
	D-22-13 25DDD UNSURV	4	23	312848	1105732	15050301	U	105.0	-	-
	D-22-13 27AAB UNSURV	4	23	312929	1105942	15050301	I	78.0	10.0	78.0
	D-22-13 35DCD UNSURV	4	23	312756	1105848	15050301	U	90.0	20.0	90.0
	D-22-15 10CCC	4	23	313145	1104828	15050301	H	385.0	-	-
	D-22-15 11DDC	4	23	313150	1104637	15050301	H	32.0	-	-
	D-22-15 12AAD2	4	23	313225	1104533	15050301	S	60.0	-	-
	D-22-16 09CDD	4	23	313147	1104303	15050301	S	-	-	-
	D-22-16 23BDD	4	23	313033	1104055	15050301	Z	-	-	-
	D-22-16 35ABD	4	23	312858	1104042	15050301	S	-	-	-
	D-22-17 31ADA	4	23	312848	1103848	15050301	U	-	-	-

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
USC-- Cont.	D-23-13 01CAD	4	23	312718	1105810	15050301	U	127.0	40.0	127.0
	D-23-13 13DAD2	4	23	312532	1105739	15050301	H	-	-	-
	D-23-13 24DDC	4	23	312423	1105749	15050301	U	400.0	370.0	400.0
	D-23-13 29CCC	4	23	312334	1110234	15050301	H	550.0	243.0 545.0	545.0 550.0
	D-23-13 36ADB	4	23	312313	1105743	15050301	P	400.0	90.0 190.0	200.0 400.0
	D-23-14 15CCB1	4	23	312527	1105428	15050301	I	-	-	-
	D-23-14 17ACA	4	23	312551	1105547	15050301	H	-	-	-
	D-23-14 19BCD1	4	23	312448	1105720	15050301	I	22.5	-	-
	D-23-14 22CDD1	4	23	312428	1105405	15050301	U	36.0	-	-
	D-23-14 25CBB	4	23	312353	1105224	15050301	H	101.0	-	-
	D-23-14 27AAA	4	23	312419	1105333	15050301	U	-	-	-
	D-23-14 36BCB1	4	23	312316	1105227	15050301	P	75.0	70.0	75.0
	D-23-15 19ABB	4	23	312513	1105054	15050301	H	425.0	-	-
	D-23-15 31CCD	4	23	312242	1105112	15050301	I	24.0	-	-
	D-23-16 08ABD UNSURV	4	23	312707	1104343	15050301	S	-	-	-
	D-23-16 22B UNSURV	4	23	312526	1104216	15050301	S	-	-	-
	D-23-17 10CBC2	4	23	312647	1103641	15050301	S	-	-	-
	D-23-17 16DAC	4	23	312552	1103656	15050301	S	-	-	-
	D-23-17 26BDD UNSURV	4	23	312417	1103514	15050301	I	34.0	-	-
	D-23-17 33DBC UNSURV	4	23	312314	1103705	15050301	S	-	-	-
	D-23-17 36AAB	4	23	312345	1103354	15050202	S	100.0	-	-
	D-23-18 18BAC	4	23	312614	1103321	15050202	S	150.0	-	-
	D-23-19 07ACD	4	3	312649	1102650	15050301	H	60.0	-	-
	D-23-19 28BBD1	4	3	312428	1102517	15050301	U	20.0	-	-
	D-24-14 18CBC	4	23	312020	1105726	15050301	P	500.0	260.0	490.0
	D-24-15 04DDD1UNSURV	4	23	312147	1104828	15050301	U	264.0	0.	264.0
	D-24-15 04DDD2UNSURV	4	23	312146	1104827	15050301	P	665.0	230.0 402.0	- 665.0
	D-24-15 07AD UNSURV	4	23	312121	1105040	15050301	U	80.0	-	-
	D-24-15 16DB UNSURV	4	23	312027	1104855	15050301	S	703.0	178.0 168.0 418.0	418.0 418.0 703.0
	D-24-16 12BAB UNSURV	4	23	312207	1104003	15050301	S	-	-	-
	D-24-17 02DCA UNSRV	4	23	312217	1103458	15050301	U	34.0	-	-
	D-24-17 03BDB UNSURV	4	23	312243	1103619	15050301	S	-	-	-
	D-24-17 04DBC UNSURV	4	23	312223	1103710	15050301	S	199.0	-	-
	D-24-17 11ABD2	4	23	312152	1103459	15050301	U	34.0	-	-
	D-24-19 11BAB	4	3	312153	1102311	15050202	S	64.0	-	-
	D-24-19 14ABA	4	3	312057	1102247	15050202	H	50.0	-	-
USC RES	D-15-13 16ADC	4	19	320738	1110055	15050301	U	-	-	-
	D-15-13 21ABA2	4	19	320705	1110057	15050301	U	131.0	-	-
	D-15-13 23AAD2	4	19	320659	1105842	15050301	P	365.0	340.0	360.0
	D-15-13 23CCB2	4	19	320627	1105934	15050301	U	280.0	-	-
	D-15-13 25CDC	4	19	320528	1105812	15050301	U	365.0	60.0	360.0
	D-15-13 26ACB	4	19	320600	1105902	15050301	P	300.0	230.0	290.0
	D-15-13 27AAC	4	19	320605	1105952	15050301	I	380.0	42.0	364.0
	D-15-13 35BCD	4	19	320503	1105923	15050301	I	440.0	150.0 415.0	395.0 440.0
	D-16-13S02BBA2	4	19	320424	1105927	15050301	I	232.0	-	-
USP	D-16-20 27DCC2	4	3	320030	1101720	15050202	I	73.0	-	-
	D-16-20 34ACD2	4	3	320005	1101709	15050202	I	117.0	67.0	117.0
	D-17-19 06AAC	4	3	315921	1102613	15050202	P	250.0	-	-
	D-17-19 08BAB	4	3	315837	1102542	15050202	U	300.0	-	-
	D-17-21 05CAC	4	3	315857	1101328	15050202	S	-	-	-
	D-17-21 32BAB	4	3	315508	1101334	15050202	S	520.0	500.0	520.0
	D-18-20 01DAD2	4	3	315339	1101455	15050202	H	550.0	-	-
	D-18-20 06BDD	4	3	315356	1102030	15050202	S	350.0	-	-
	D-18-21 06AAB	4	3	315417	1101400	15050202	H	60.0	-	-
	D-19-21 12DBA2	4	3	314738	1100906	15050202	S	250.0	-	-
	D-19-21 24BCC	4	3	314600	1100937	15050202	S	224.0	-	-
	D-20-17 23CDD	4	3	314027	1103446	15050202	S	450.0	350.0	450.0
	D-20-17 24CDD	4	23	314026	1103349	15050202	S	230.0	130.0	230.0
	D-20-18 05DAB	4	23	314320	1103122	15050202	S	-	-	-
	D-20-18 17BCB	4	23	314150	1103204	15050202	U	248.0	248.0	250.0
	D-20-18 19ACB	4	23	314100	1103236	15050202	H	368.0	-	-
	D-20-18 19CCD2	4	23	314027	1103301	15050202	H	-	-	-
	D-20-18 21CCC	4	23	314026	1103107	15050202	H	268.0	-	-
	D-20-18 29DBD	4	23	313946	1103127	15050202	T	-	-	-
	D-20-18 30CBC	4	23	313950	1103308	15050202	S	-	-	-
	D-20-20 02DDD	4	3	314300	1101554	15050202	S	-	-	-
	D-20-20 07BDB	4	3	314244	1102043	15050202	H	300.0	213.0	300.0
	D-20-23 08BAA	4	3	314251	1100108	15050202	S	520.0	-	-
	D-21-18 05A UNSURV	4	23	313828	1103133	15050202	S	-	-	-
	D-21-18 30BCD	4	23	313446	1103332	15050202	U	-	-	-

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
USP--Cont.	D-21-20 16ADA1	4	3	313639	1101835	15050202	U	807.0	340.0 370.0 440.0 590.0 680.0	360.0 410.0 520.0 640.0 790.0
	D-21-20 30BA UNSURV	4	3	313458	1102112	15050202	U	796.0	414.0 787.0	775.0 796.0
	D-21-21 27DBB	4	3	313431	1101145	15050202	H	600.0	-	-
	D-21-21 31CAB	4	3	313343	1101506	15050202	P	620.0	200.0	600.0
	D-21-22 06ACD2	4	3	313808	1100838	-	I	-	-	-
	D-21-23 29DBC	4	3	313419	1100136	15050202	H	973.0	-	-
	D-22-18 15CBD	4	23	313104	1103029	15050202	S	-	-	-
	D-22-20 10ABB	4	3	313224	1101756	15050202	P	805.0	520.0	800.0
	D-22-20 24AAA2	4	3	313037	1101527	15050202	P	795.0	485.0 680.0	676.0 795.0
	D-22-21 06BCC	4	3	313253	1101520	15050202	P	600.0	312.0	576.0
	D-22-21 23CBA	4	3	313009	1101111	15050202	H	180.0	-	-
	D-22-22 06DAB	4	3	313250	1100823	15050202	I	715.0	80.0 462.0	452.0 715.0
	D-23-21 06CCC2	4	3	312712	1101521	15050202	S	675.0	-	-
	D-23-22 16BDD	4	3	312556	1100647	-	I	-	-	-
	D-23-22 18BBB	4	3	312614	1100919	15050202	U	-	-	-
	D-23-22 21ACD	4	3	312505	1100639	15050202	I	264.0	0.	264.0
	D-23-22 33DCD2	4	3	312250	1100639	15050202	U	91.5	-	-
	D-23-23 06BCC	4	3	312739	1100312	-	H	1000.0	-	-
	D-24-21 03AAB	4	3	312255	1101133	-	H	-	-	-
	D-24-22 20BBA	4	3	312006	1100755	15050202	S	272.0	100.0	272.0
	D-24-23 06AAA1	4	3	312244	1100216	15050202	H	250.0	50.0	250.0
USR	A-01-15 04CBD1	4	7	332717	1105013	15060103	U	194.0	191.0 192.0	194.0 195.0
	A-01-15 04DCC1	4	7	332707	1104955	15060103	U	60.9	57.6 57.0 36.0	60.6 60.0 39.0
	A-01-15 09AAD2	4	7	332658	1104932	15060103		-	-	-
	A-02-07 02BAA	4	13	333309	1113625	-	H	-	-	-
	A-02-15 07BDD1	4	7	333151	1105205	15060103	U	55.8	50.6	53.6
	A-02-15 29DBD1	4	7	332904	1105048	15060103	U	112.0	109.0 106.0	112.0 109.0
	D-01-15 13BDA	4	7	332055	1104555	15060103	H	105.0	-	-
VER	A-14-05 17AAC	4	25	343638	1115013	15060202	P	160.0	80.0	160.0
	A-14-10 32DBD	4	5	343314	1111838	15060203	U	600.0	102.0	600.0
	A-15-03 12ADB1	4	25	344250	1115834	15060202	U	400.0	[illegible] 175.0	175.0 400.0
	A-15-04 02CCB4	4	25	344312	1115408	15060202	I	300.0	178.0	300.0
	A-15-04 04DDC1	4	25	344307	1115527	15060202	H	250.0	-	-
	A-17-05 15ABD	4	25	345134	1114900	15060202	U	805.0	572.0	-
	A-17-06 30BBB	4	5	344957	1114631	15060202	U	465.0	-	-
	A-18-07 15CCB2	4	5	345619	1113855	15060202		232.0	112.0 202.0	196.0 232.0
	A-18-07 15CCC1	4	5	345612	1113852	15060202	P	200.0	110.0	195.0
VRG	B-41-15 33CAB	4	15	365434	1135547	15010010	H	98.0	78.0	98.0
WAT	C-02-01 19ADA	4	13	331434	1122331	15070101	I	802.0	297.0 639.0 800.0	621.0 800.0 802.0
	C-02-01 20BAD	4	13	331440	1122302	15070101	U	800.0	-	-
	C-02-01 33AAA	4	13	331300	1122132	15070101	I	1030.0	240.0	-
	C-02-01 33CDD	4	13	331214	1122155	15070101	I	1070.0	200.0	-
	C-02-02 05CDC	4	13	331637	1122925	15070101	U	1090.0	421.0 461.0 938.0 1040.0	461.0 938.0 1040.0 1090.0
	C-02-02 09CCC	4	13	331543	1122838	15070101	I	973.0	-	-
	C-02-02 10CCC	4	13	331545	1122732	15070101	I	750.0	300.0	722.0
	C-02-02 12ACC	4	13	331610	1122502	15070101	U	870.0	80.0 305.0 730.0	305.0 730.0 870.0
	C-02-02 25CCC	4	13	331311	1122529	15070101	I	882.0	290.0	868.0
	C-02-02 27CBB	4	13	331328	1122735	15070101	I	1050.0	250.0 551.0 1030.0	551.0 1030.0 1050.0
	C-02-02 27CCC	4	13	331307	1122737	15070101	I	940.0	295.0 497.0 895.0	497.0 895.0 940.0
	C-03-01 07ACC	4	13	331057	1122358	15070101	U	-	-	-
	C-03-01 19DCC	4	13	330846	1122355	15070101	U	600.0	450.0	566.0
	C-03-01 21DCC	4	13	330846	1122151	15070101	I	1170.0	200.0 471.0 1020.0	471.0 1020.0 1170.0
	C-03-01 28DDD	4	13	330751	1122134	15070101	I	1170.0	300.0 1100.0	1100.0 1170.0
	C-04-01 23CDB	4	13	330338	1122002	15070101	U	530.0	-	-
	D-03-01 07BBB2	4	13	331114	1121817	15070101	U	1530.0	810.0 950.0	900.0 1530.0
	D-04-01 28CDD	4	13	330239	1121552	15070101	U	750.0	300.0	750.0

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
WHM	A-05-30 13DBC	4	1	334929	1090753	15040004	P	282.0	262.0	282.0
	A-05-31 17CAA	4	1	334943	1090553	15040004	H	100.0	20.0	-
	A-07-27 01CCA1	4	1	340137	1092701	15020001	H	100.0	80.0	-
	A-07-27 01CDB	4	1	340135	1092700	15020001	H	100.0	40.0	100.0
	A-07-30 14BDD	4	1	340010	1090901	15020001	H	226.0	160.0	-
	A-09-22 36CBB	4	17	340752	1095817	15020005	H	200.0	40.0	-
	A-10-22 30ABA	4	17	341429	1100252	15020005	H	750.0	550.0	-
WIL	D-09-23 08ABC	4	9	324018	1100054	15050201	S	-	-	-
	D-12-23 12DBA	4	3	322415	1095654	15050201	I	269.0	-	-
	D-12-23 14ABB	4	3	322349	1095806	15050201	I	285.0	90.0 135.0	110.0 185.0
	D-12-24 20CBB	4	3	322234	1095530	15050201	I	200.0	-	-
	D-13-24 03ADA	4	3	322008	1095234	15050201		-	-	-
	D-13-24 05CCB2	4	3	321941	1095531	15050201	I	240.0	0.	201.0
	D-13-24 16BBB	4	3	321834	1095430	15050201		1360.0	-	-
	D-13-24 35BBC2	4	3	321553	1095225	15050201	I	105.0	-	-
	D-14-24 14BBA2	4	3	321323	1095217	15050201	H	-	-	-
	D-14-24 30DBA	4	3	321115	1095552	15050201	S	56.0	-	-
	D-14-26 18BDD	4	3	321303	1094352	15050201	I	500.0	80.0	495.0
	D-15-23 20CDD	4	3	320630	1095507	15050201	H	143.0	-	-
	D-15-24 08CAD	4	3	320830	1095509	15050201	I	250.0	-	-
	D-15-25 25ADA	4	3	320614	1094424	15050201	I	500.0	-	-
	D-16-24 21CCC	4	3	320119	1095450	15050201	I	884.0	90.0 484.0	484.0 884.0
	D-16-25 09ADD	4	3	320330	1094751	15050201	U	445.0	35.0 350.0	350.0 445.0
	D-16-25 13CDD	4	3	320213	1094516	15050201	I	381.0	75.0	378.0
	D-16-25 36AAA	4	3	320022	1094446	15050201	I	516.0	-	-
	D-16-26 02AAD	4	3	320435	1093943	15050201	U	700.0	-	-
	D-16-26 05DAD	4	3	320409	1094245	15050201	I	700.0	-	-
	D-16-26 06DDA	4	3	320403	1094347	15050201	U	662.0	135.0 338.0 420.0 494.0	155.0 380.0 490.0 662.0
	D-16-26 14DAA	4	3	320232	1093942	15050201	I	-	-	-
	D-16-26 29AAA	4	3	320114	1094247	15050201	I	540.0	-	-
	D-16-28 04BBB	4	3	320445	1093024	15050201	S	-	-	-
	D-17-24 01DAC	4	3	315855	1095101	15050201	H	128.0	68.0	126.0
	D-17-24 36CCC	4	3	315417	1095147	15050201		-	-	-
	D-17-25 07ADD	4	3	315817	1094952	15050201	H	-	-	-
	D-17-25 08BCC	4	3	315816	1094945	15050201	I	500.0	-	-
	D-17-26 04ADD	4	3	315910	1094145	15050201	I	500.0	140.0	395.0
	D-17-26 12BAA	4	3	315835	1093908	15050201	I	395.0	115.0 300.0	286.0 395.0
	D-17-27 01DAD	4	3	315858	1093232	15050201	I	1000.0	250.0 425.0	425.0 1000.0
	D-17-27 21BCA	4	3	315642	1093626	15050201	I	951.0	280.0 320.0	320.0 951.0
	D-17-27 35CCB	4	3	315429	1093429	15050201	I	400.0	200.0	400.0
	D-17-28 06CDA	4	3	315855	1093201	15050201	I	1000.0	300.0 425.0	425.0 1000.0
WMD	C-17-07 24CDD	4	19	315533	1125624	15080102	S	430.0	-	-
	C-17-08 09ADD UNSURV	4	19	315743	1130502	15080102		101.0	-	-
	C-17-08 11DCD UNSURV	4	19	315712	1130321	15080102	U	18.7	-	-
	C-18-05 07AAA	4	19	315252	1124846	15080102	U	84.0	-	-
	C-18-06 01DBB2	4	19	315315	1125010	15080102	S	-	-	-
WMN	B-16-04 14BBB	4	25	344636	1123944	15060201	I	352.0	55.0	-
YUM	C-08-21 21BCA	4	27	324330	1142526	15070201	U	137.0	105.0	130.0
	C-08-22 25DAC3	4	27	324212	1142748	15070201	U	84.0	-	-
	C-08-23 27DDD	4	27	324202	1143553	15030107	I	163.0	135.0	-
	C-08-24 34DDD	4	27	324102	1144205	15030108		-	-	-
	C-09-21 07AAD	4	27	324005	1142636	15070201	U	401.0	165.0	-
	C-09-22 11BBB	4	27	324011	1142939	15030108	U	600.0	160.0	300.0
	C-09-22 17DCA	4	27	323840	1143201	15030108	U	191.0	165.0	-
	C-09-23 14CCC3	4	27	323827	1143551	15030108	U	170.0	-	-
	C-09-25 35CBD	4	27	323602	1144804	15030107	U	1200.0	-	-
	C-10-23 15AAA	4	27	323402	1143550	15030108	I	300.0	112.0 270.0	140.0 285.0
	C-10-23 31BBB1	4	27	323124	1143955	15030108	U	120.0	-	-
	C-10-25 26CDB	4	27	323133	1144755	15030107		320.0	300.0	320.0
	C-11-21 04DDD	4	27	322943	1142435	15030108		350.0	-	-
	C-11-24 15CCC	4	27	322757	1144300	15030108	U	180.0	178.0	-
	C-11-24 23BCB	4	27	322737	1144153	15030108	U	1040.0	165.0	-
	C-12-22 06DAA	4	27	322450	1143242	15030108	U	202.0	168.0	-

CODES USED TO IDENTIFY STATE, COUNTY, AND PRIMARY USE OF WATER

State and County

04	Arizona	35	New Mexico
001	Apache	023	Hidalgo
003	Cochise		
005	Coconino		
007	Gila		
009	Graham		
011	Greenlee		
012	La Paz		
013	Maricopa		
015	Mohave		
017	Navajo		
019	Pima		
021	Pinal		
023	Santa Cruz		
025	Yavapai		
027	Yuma		

Primary Use of Water

C	Commerical
D	Dewater
E	Power
H	Domestic
I	Irrigation
K	Mining
M	Medicinal
N	Industrial
P	Public Supply
R	Recreation
S	Stock
T	Institution
U	Unused
Z	Other

WATER-LEVEL INFORMATION

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
AGF	A-07-01 17DAD	1678.00	19690716	19790727	40.00	19880129	82.80	19880129	82.80	
	A-08-02 03BDC1	1998.00	19810205	19810205	14.10	19850129	15.74	19880126	14.30	
	A-09-02 34DDD	2020.00	19780504	19840209	34.70	19810205	44.90	19880126	39.35	
	A-12-02 01DAC	4070.00	19780831	19870128	124.80	19780831	130.10	19880126	125.00	
	A-12-02 23BAA	3870.00	19780905	19850129	37.75	19811222	40.76	19880126	37.80	
	A-13-01 02CAC	4603.00	197304	19800401	82.30	19810206	93.40	19880223	84.80	
								19880623	86.30	
								19880913	86.30	
	A-13-01 04ABA1	4690.00	19810925	19810925	100.68	19880621	102.10	19880621	102.10	
	A-13-01 05BAC	4970.00	19810924	19810924	228.82	19880621	238.60	19880621	238.60	
	A-13-01 10CBD	4654.00	19810924	19880623	25.96	19810924	35.46	19880623	25.96	
	A-14-01 17AAD	4778.99	19790115	19880622	112.40	19810720	114.40	19880622	112.40	
	A-14-01 20CDD	4777.62	19790115	19790115	97.58	19810923	97.82	19880622	97.70	
	A-14-01 27DBB	4659.91	19670318	19650305	47.17	19830824	63.35	19880223	47.60	
								19880622	54.60	
								19880913	48.70	
	A-14-01 28BBB	4714.98	19561205	19850305	12.44	19870902	59 70	19880223	32.80	
								19880622	45.90	
								19880913	41.50	
	A-14-01 28BCB	4758.50	19790228	19790228	126.30	19810923	133.67	19880622	129.60	
	A-14-01 28DAC	4666.38	19561205	19561205	35.86	19810922	86.08	19880622	81.30	
	A-14-01 29AAA	4726.02	19710812	19790320	59.90	19810211	108.40	19880622	69.10	
	A-15-01 28ACC	5072.00	19790227	19850326	304.30	19790927	320.35	19880223	308.30	
								19880913	309.60	
	B-14-01 11DAA	5043.52	19790124	19870223	320.60	19830524	325.81	19871028	321.10	
								19871125	320.90	
								19880224	321.30	
								19880407	320.60	
								19880502	321.40	
								19880525	321.30	
								19880622	320.90	
								19880804	321.20	
								19880913	321.42	
	B-14-01 15ABA	5117.42	19711014	19711014	454.30	19880913	553.30	19880224	545.30	
								19880622	551.90	
								19880913	553.30	
	B-14-01 22ADA	5184.10	19710301	19880622	324.60	19830823	340.25	19880224	327.40	
								19880622	324.60	
								19880913	325.00	
	B-14-01 22BDC	5221.44	19710730	19880622	187.60	19710730	205.00	19880622	187.60	
	B-14-01 24DCC	5080.00	19810924	19810924	256.20	19880623	260.30	19880623	260.30	
	B-14-01 25DAC	4933.00	19780419	19790620	40.78	19880623	49.40	19880623	49.40	
	B-14-01 26AAA	5120.00	19780426	19880623	206.50	19810923	207.62	19880623	206.50	
	B-14-01 27DCC	5265.00	19780418	19880623	52.50	19820223	56.89	19880623	52.50	
ALT	D-16-09 24DAC	2650.00	19550927	19590106	145.68	19750321	185.00	19871214	151.70	
								19880531	147.70	
	D-16-10 04BDA	2540.00	19451016	19451016	158.70	19810128	169.70	19871214	164.00	
	D-16-10 08BDD	2574.00	19530312	19530312	152.20	19810128	160.90	19871214	155.30	
	D-16-10 29DDD	2900.00	19860114	19871214	405.30	19860114	416.20	19871214	405.30	
	D-16-10 34BAB	3096.00	19640504	19821229	603.00	19850605	606.00	19871214	605.60	
								19880531	603.90	
	D-16-11 08BDB	2820.00	19750320	19750320	616.00	19790209	687.00	19871207	622.90	
								19871214	622.50	
	D-16-11 09ACD	2900.00	19821001	19831228	718.70	19871207	740.60	19871207	740.60	
								19871214	727.70	
	D-17-09 02DDA	2744.00	19550927	19841206	181.20	19880531	192.00	19871214	186.20	
								19880531	192.00	
	D-18-09 11BCC	2923.00	19600104	19600104	231.40	19620105	256.84	19871214	244.90	
								19880531	243.60	
	D-19-09 03ACA	3054.00	19580103	19861210	318.40	19770114	332.00	19871214	322.70	
								19880531	322.90	
	D-19-09 18AAA	3277.00	19810324	19861210	445.20	19851204	448.30	19871214	445.80	
								19880531	446.70	
	D-20-08 35BDB	3463.00	19720114	19880531	460.20	19770114	481.00	19871214	460.50	
								19880531	460.20	
	D-20-09 17ABA	3254.00	19520916	19621221	267.65	19750307	322.10	19871214	294.49	
								19880531	294.80	
	D-20-10 25DAC	3650.00	19721129	19721129	5.52	19871210	8.10	19871210	8.10	
	D-21-08 27ADA	3465.00	19510613	19800123	314.70	19570925	338.50	19871214	314.20	
								19880531	315.20	
	D-22-08 19DBC	3610.00	19501018	19850605	72.57	19771220	100.20	19871214	76.69	
								19880531	77.36	
	D-22-08 29DBA	3598.00	19640110	19871214	136.24	19701216	152.50	19871214	136.24	
								19880531	137.83	
	D-22-08 34ABD	3450.00	19640110	19640110	116.90	19831207	200.59	19871214	191.08	
								19880513	191.35	
ARA	D-07-20 21BBB	3515.00	19530723	19530723	7.23	19590212	89.32	19880223	48.30	
	D-08-21 18DAD	3880.00	19550201	19840125	19.60	19770202	43.40	19880223	31.00	
	D-09-22 19DCC	4280.00	19491101	19510301	70.53	19750124	104.90	19880223	104.60	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
AVR	D-11-10 08DDD	1884.00	19520106	19520106	150.70	19771221	293.50	19871207	240.90	
								19880601	243.50	
	D-11-10 22ADD	1915.00	19400228	19400228	140.66	19761207	261.10	19871207	250.00	
								19880601	244.10	
	D-11-10 27DAA	1935.00	19530105	19530105	182.18	19760202	317.30	19871208	259.30	
								19880602	264.15	
	D-11-10 29DBC	1939.00	195912	195912	226.20	198012	297.60	19871214	275.80	
	D-12-10 04ACD	1963.97	19611219	19611219	232.88	19801201	310.60	19871214	29[illegible].20	
	D-12-10 09DDD	1984.00	19511128	19511128	168.48	19770113	309.20	19871231	28[illegible].70	
	D-12-10 12BCD	1989.00	19520130	19520130	186.99	19821201	263.40	19871214	262.00	
	D-12-10 14DCC	2005.00	198012	19811217	206.60	198012	215.50	19871214	212.50	
	D-12-10 23ACD	2025.80	1952	1952	190.00	19821206	227.50	19871208	222.90	
								19880602	222.50	
	D-12-10 31BDA	2064.00	198012	19861216	370.50	198012	378.90	19871214	370.90	
	D-12-10 31DCD	2065.00	198012	19811217	338.10	19851219	342.40	19871215	339.80	
	D-12-10 33CDC1	2067.80	19621213	19621213	290.45	19800103	374.10	19871214	355.70	
	D-12-10 33DDD	2068.00	19510627	19520130	203.95	19821201	352.90	19871214	343.50	
	D-12-11 20AAA	2016.02	19511011	19511011	220.67	19770113	354.20	19871207	309.60	
								19880602	319.60	
	D-12-11 20DDA	2050.00	19521103	19521103	262.20	19861224	344.80	19871214	338.90	
	D-12-11 30CDD	2052.27	195912	195912	226.25	19811217	306.50	19871214	301.20	
	D-12-11 30DCD	2051.00	198012	198012	267.60	19871214	280.50	19871214	280.50	
	D-13-10 04DDD	2091.00	19520129	19520129	218.19	19851216	369.90	19871216	366.20	
	D-13-10 14BCC	2130.00	19650113	19650113	315.35	19871215	386.50	19871215	386.50	
	D-13-10 14CDC	2142.00	19531228	19531228	264.58	19870126	372.40	19871215	372.00	
	D-13-10 15DDD	2143.00	19531228	19531228	268.21	19851216	386.70	19871215	380.10	
	D-13-10 20BCD	2131.00	198012	19861216	399.00	198012	409.10	19871215	400.30	
	D-13-10 20CCD	2148.00	19520315	19520315	262.00	198012	425.10	19871215	418.00	
	D-13-10 22DDD	2168.25	19530825	19530825	282.40	19871216	391.80	19871216	391.80	
	D-13-10 24DCC	2163.33	19520305	19520305	245.00	19851217	374.00	19871216	371.30	
	D-13-10 24ACD	2190.00	19510620	19520129	270.74	198012	404.40	19871216	393.60	
	D-13-10 24DAD	2190.00	19530225	19530225	273.40	198012	394.40	19871216	382.90	
	D-13-11 11ACD	2393.00	19591222	19591222	267.65	19701215	343.90	19871214	293.30	
								19880602	284.20	
	D-13-11 31CCC1	2210.84	19530306	19530306	276.25	19771221	410.40	19871214	374.50	
								19880602	374.10	
	D-13-11 31CDD1	2213.04	19510620	195.0620	264.94	19851218	368.10	19871215	366.60	
	D-14-10 11AAA	2242.00	19790302	1984[illegible]219	400.30	19790302	403.30	19871216	401.80	
	D-14-10 12ABA	2240.00	19630111	19630111	362.78	19761207	429.00	19871214	393.90	
								19880602	393.50	
	D-14-11 04CAA	2261.00	195303	195303	294.[illegible]	19770113	392.60	19871214	383.30	
								19880602	383.60	
	D-14-11 06CCD	2230.00	19520129	19520129	274.05	19831229	373.40	19871215	371.90	
	D-14-11 07BAD	2242.00	195111	195111	280.00	19770101	374.30	19871215	370.80	
	D-14-11 08CCC	2257.00	19540102	19540102	291.60	19721201	370.60	19871214	362.80	
								19871215	362.30	
	D-14-11 22CBB	2283.00	19750109	19750109	323.70	19871215	349.70	19871215	349.70	
	D-14-11 34AAD	2320.00	19540210	19540210	292.75	19871215	354.90	19871215	354.90	
	D-15-10 25CDC	2518.00	19540202	19560105	159.98	19540209	172.88	19871214	161.30	
	D-15-10 33CAC	2529.60	19400314	19460823	149.27	19771220	206.30	19871214	163.10	
								19880531	162.50	
	D-15-10 35AAA	2529.60	19400314	19481007	212.17	19731220	232.08	19871214	228.90	
								19880531	225.40	
	D-15-11 05CCD	2368.00	19530306	19530306	281.14	19880531	353.90	19871214	353.20	
								19880531	353.90	
	D-15-11 11ADD	2388.00	19530101	19530101	330.00	19871214	387.60	19871214	387.60	
	D-15-11 12BBB	2365.00	19741117	19741117	340.00	198712[illegible]4	368.30	19871214	368.30	
	D-15-11 15BBB2	2390.00	19661116	19661116	324.00	19871215	393.60	19871215	393.60	
	D-15-11 22DDD	2510.00	19670120	19670120	380.00	19840817	410.10	19871214	406.40	
BIC	B-17-02 04DBD	4350.00	19650121	19830215	97.00	197209	118.00	19880127	99.40	
	B-17-02 05CBA	4380.00	197209	19840124	136.40	197209	156.00	19880127	136.90	
	B-17-02 06BBB	4200.00	19521009	19840124	128.20	19630205	138.78	19880127	128.90	
	B-18-03 23BBC	4420.00	19521009	19660210	8.89	19571217	17.76	19880128	16.10	
	B-19-03 19CBD	4525.00	19740205	19840124	59.40	19740205	66.20	19880128	60.10	
	B-19-04 10ADA	4563.00	19740205	19860206	65.40	19750312	81.30	19880128	66.80	
	B-24-08 17DCD1	5180.00	19240301	19240301	802.00	19880127	822.90	19880127	822.90	
BIS	B-16-13 36CCC	1880.00	19450112	19800305	9.04	19561023	13.64	19880111	11.12	
	B-21-10 17CCD1	5058.00	19800708	19851226	116.70	19830217	127.00	19880114	126.00	
	B-21-13 24BCD	3620.00	195204	19780203	370.30	195204	397.20	19880111	373.70	
	B-22-08 15CCB	5507.00	19800705	19860101	488.00	19800715	492.50	19880114	489.60	
BLM	04 56-2.85x14.19	6644.00	19830816	19830816	1094.40	19850805	1124.60	19880105	1116.40	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						STATUS
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	
BLM RES	01 058-05.09X05.82	5722.00	19540704	19871209	48.70	19540704	60.00	19871209	48.70	
	02 040-00.85X12.17	6670.00	19590811	19590811	317.50	19850328	418.70	19871209	412.70	
	02 040-04.03X14.68	6435.00	19521210	19850328	255.80	19810107	290.45	19871209	286.00	
	02 040-05.38X15.27 BMOB	6345.00	19770201	19770301	215.85	19830126	216.79	19871209	216.40	
	02 040-11.20X13.60	6264.00	19500613	19860424	172.20	19500613	176.50	19871211	173.50	
	03 077-11.59X14.61	5260.00	19550630	19860422	192.80	19790717	235.20	19871201	202.10	
	03 097-08.22X06.32	5381.00	19531029	19880510	229.90	19850620	238.60	19880510	229.90	
	04 074-08.95X02.95 BMOB	6340.00	19770420	19770420	736.00	19871203	788.50	19871203	788.50	
	04 075-00.61X16.21 BMOB	5858.00	19770201	19770201	330.90	19871211	366.10	19871211	366.10	
	04 075-05.09X12.30	5985.00	19630626	19630626	432.00	19871229	478.20	19871229	478.20	
	06 094-03.23X11.05	5809.00	19700610	19700610	292.50	19870601	406.20	19880323	387.60	
	06 095-06.50X08.61	5650.00	19830816	19850805	250.20	19880107	259.40	19880107	259.40	
	08 037-06.23X02.51	5200.00	19531113	19880504	38.40	19531113	46.90	19880504	38.40	
	08 037-12.81X16.98	6024.00	19570815	19670907	438.30	19850718	536.40	19871210	533.60	
	08 038-04.43X15.39	5950.00	19651001	19651001	405.00	19850718	478.20	19871210	458.80	
	08 038-07.04X10.39	5960.00	19521007	19870408	420.50	19670829	480.80	19871210	420.50	
	08 038-09.40X07.08 BMOB	5650.00	19770201	19770301	132.07	19871202	173.80	19871202	173.80	
	08 039-00.70X01.57 BMOB	5735.00	19590725	19590725	54.50	19810107	139.65	19871203	131.40	
	08 039-02.11 X 02.94	5885.00	19760317	19790717	227.00	19871202	274.40	19871202	274.40	
	08 039-08.31X05.09	6040.00	19720207	19790306	120.20	19810107	128.15	19871202	123.40	
	08 039-11.83X08.69	6262.00	19670822	19670822	99.42	19710403	119.88	19871211	117.30	
	08 054-06.82X02.39	5938.00	19630416	19871210	450.50	19630416	505.00	19871210	450.50	
	08 054-10.36X00.63 BMOB	5863.00	19770201	19770401	373.51	19800124	376.22	19871203	374.00	
	09 037-01.81X14.35	5615.00	19521213	19880504	166.10	19840814	170.20	19880504	166.10	
	10 054 01.35X13.20	5903.00	19600414	19860423	298.20	19790718	315.80	19871210	310.60	
	10 054-01.47X09.39	5757.00	19540804	19540804	170.00	19840814	211.40	19871210	197.90	
	10 54-1.41X1.85	5775.00	19531202	19840814	255.10	19850718	257.50	19880504	256.20	
BUT	B-07-14 16AAA	1618.00	19860731	19860731	348.20	19861204	349.40	19871209	348.30	
	B-07-15 02DDC	1425.00	19670525	19720216	148.30	19820125	165.30	19871209	159.00	
	B-07-15 09DDD	1365.00	19670525	19741213	94.20	19870311	105.80	19871209	105.30	
	B-07-15 10ADA	1404.00	19840629	19880315	139.70	19840629	150.20	19871209	139.90	
								19880315	139.70	
	B-07-15 11CAA	1416.00	19860109	19871209	150.50	19860109	155.80	19871209	150.50	
								19880601	159.60	S
	B-07-15 11DDD	1444.00	19660512	19670525	166.72	19840629	189.60	19871209	178.30	
								19880601	183.00	S
	B-07-15 12AAD	1478.00	19840629	19871209	214.30	19840629	221.10	19871209	214.30	
	B-07-15 12DAD	1484.00	19670525	19670525	213.88	19740916	242.50	19871209	226.00	
	B-07-15 13DBC	1493.00	19840629	19871209	230.00	19840629	234.60	19871209	230.00	
	B-07-15 15AAD3	1402.00	19850316	19871209	143.60	19860109	143.90	19871209	143.60	
								19880315	144.50	
								19880601	157.00	S
	B-08-13 04DDD1	1790.00	19741018	19861204	512.40	19750227	524.80	19871209	515.40	S
								19871210	513.30	
	B-08-14 20DAB	1522.00	19481109	19481109	242.00	19860109	247.80	19871209	247.30	
								19880601	247.50	
	B-08-14 23CDD	1600.00	19800211	19840626	322.40	19800211	326.94	19871209	323.20	
	B-08-14 23DDD	1618.00	19650824	19710224	332.00	19710127	380.50	19871209	346.20	
	B-08-14 25BDC	1645.00	19690123	19741125	367.70	19840626	372.20	19871209	371.00	
	B-08-14 29CDD	1490.00	19790929	19810213	210.00	19790929	215.20	19871209	210.60	
								19880601	210.90	
BWM	B-09-09 04CBC	2360.00	19790518	19860129	643.60	19790518	649.30	19880212	648.10	
	B-10-14 14DBD	881.00	19810402	19830308	14.32	19880212	16.33	19880212	16.33	
	B-10-14 23BAC	891.00	19810402	19830308	30.25	19860129	32.83	19880212	32.69	
	B-11-04 18CCC	4455.00	19730427	19800410	8.90	19780221	21.69	19880210	11.02	
	B-11-06 19CBD	3258.00	19530724	19850220	36.20	19690219	77.90	19880210	38.07	
	B-11-08 20ADB	2610.00	19790914	19880209	79.52	19790914	82.52	19880209	79.52	
	B-11-10 31CBA	2160.00	19810401	19850221	640.60	19860129	642.20	19880212	642.00	
	B-11-11 17ACA2	1270.00	19790607	19830307	7.13	19860129	9.73	19880212	9.69	
	B-11-11 31BBB1	1350.00	19790619	19861118	53.68	19790619	57.15	19880212	53.74	
	B-12-03 06CDD	4590.00	19760921	19850220	405.50	19800409	408.80	19880210	405.90	
	B-12-05 02ACD2	3830.00	19730404	19830216	10.22	19760324	41.10	19880210	15.96	
	B-12-06 31AAD	3470.00	19791018	19810408	83.50	19880210	89.06	19880210	89.06	
	B-13-04 21DB U PZ2	4260.00	19730130	19850220	105.30	19730130	109.80	19880210	107.40	
	B-13-04 21DBU-PZ1	4260.00	19840207	19840207	97.00	19880210	101.80	19880210	101.80	
	B-13-04 26BCC1 UNSRV	4380.00	19730117	19850128	243.20	19730417	255.40	19880210	244.10	
	B-13-04 27AB U PZ1	4360.00	19810319	19880210	141.70	19820119	144.52	19880210	141.70	
	B-13-04 27AB U PZ2	4360.00	19800117	19850220	260.30	19800117	284.50	19880210	261.60	
	B-13-06 09DCD	3500.00	19450117	19450117	13.98	19561025	32.83	19880210	14.41	
	B-13-13 07DDB1	1755.00	19791120	19860130	83.40	19840208	143.90	19880211	86.97	
	B-13-13 07DDB2	1770.00	19850221	19860130	145.30	19880211	149.80	19880211	149.00	
	B-13-15 17CAC2	2080.00	19790208	19850221	667.30	19790208	668.40	19880211	667.70	
	B-14-04 22BAD	4540 00	19741107	19790315	74.17	19770119	97.60	19880210	91.50	
CDI	A-18-14 13ABD3	5160.00	19530826	19530826	268.96	19780309	278.20	19880211	274.90	
	A-18-15 28AAD	5180.00	19690904	19850307	263.60	19790103	268.70	19880407	265.80	
	A-19-16 06CDB	4830.00	19650430	19861219	38.90	19710407	41.35	19880211	39.70	
CHI	B-04-19 33CCA	917.00	19740403	19850117	25.80	19760203	33.18	19880126	28.80	
	B-18-21 05AAD	905.00	198304	19880211	452.00	198304	460.00	19880211	452.00	
	B-18-21 05ACC	845.00	19850319	19880211	393.70	19850319	476.00	19880211	393.70	
	B-20-22 24DDD	905.00	19840621	19840621	418.30	19870116	420.90	19880211	420.70	
	B-21-21 21CBB	980.00	19840614	19870115	387.10	19880211	401.40	19880211	401.40	
	B-25-20 15AAA	2814.00	19840621	19870122	597.00	19840621	597.70	19880211	597.50	
	B-26-20 06ABC	2460.00	19840704	19870122	462.40	19840704	462.70	19880211	462.50	
	B-28-21 20AAC	2330.00	19840703	19850829	304.80	19840703	305.00	19880211	304.90	
	B-30-20 06CA UNSURV	1350.00	19840620	19850829	56.07	19840620	57.19	19880211	56.90	
	C-05-20 24ADD	832.00	19861215	19861215	632.00	19880120	634.50	19880120	634.50	
	C-06-20 32ABD2		19861101	19861101	240.00	19880120	240.20	19880120	240.20	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
CHN RES	09 036-13.75X16.01	5633.00	19490803	19860423	104.80	19490803	119.50	19880505	109.30	
	10 071-05.55X01.98	5425.00	19660324	19850327	16.08	19660712	29.35	19871210	16.80	
CHV	A-15-12 15DDC	6503.00	19660505	19880517	672.00	19830224	680.20	19880517	672.00	
	A-17-14 17ADD	5540.00	19641106	19880523	405.30	19870320	407.60	19880523	405.30	
CON	A-11-24 22DBC	6650.00	19741218	19870415	707.00	19810126	710.05	19880413	707.90	
	A-11-25 18DCC	6430.00	194607	19580821	22.00	19780223	28.48	19880413	26.70	
	A-12-26 02BDA	6295.00	19750506	19750506	68.33	19810414	106.80	19880316	84.70	
	A-12-26 13DCD	5970.00	1958	1958	40.00	19810924	59.00	19880317	54.30	
	A-13-26 06DCB	5640.00	19740601	19840201	82.20	19850403	170.10	19880413	161.10	
	A-13-26 12DDA	6105.00	19760415	19810925	29.30	19800430	49.10	19880314	38.70	
	A-14-24 29DCC	5640.00	19560817	19560817	180.00	19800922	280.50	19880314	238.90	
	A-14-25 14CCD	5600.00	19750305	19750305	172.40	19810925	226.90	19880314	190.20	
	A-14-26 21BCC	5475.00	195011	195011	9.00	19800924	37.10	19880317	24.90	
	A-14-26W18DBC	5430.00	19530730	19600420	14.90	19780914	63.03	19880413	29.90	
DOU	D-18-26 11ADA	4333.00	19660207	19660207	113.23	19830119	189.90	19880222	183.50	
	D-18-26 16BBB	4281.90	19460528	19460528	80.82	19871119	150.60	19871119	150.60	
								19880222	150.30	
								19880525	150.10	
								19880824	150.00	
	D-18-26 28AAA2	4268.00	19650211	19650211	89.01	19860206	181.90	19880222	181.30	
	D-18-27 08BAC	4405.00	19840313	19880222	202.40	19840907	205.40	19871119	203.10	
								19880222	202.40	
								19880525	204.20	
								19880824	203.30	
	D-19-26 03BBB	4240.00	19650223	19650223	76.00	19861124	157.20	19880222	153.70	
	D-19-26 23DAA	4300.00	19650312	19650312	179.79	19790213	291.90	19880222	265.20	
	D-19-26 29BAB2	4205.00	19491221	19500209	39.07	19880824	116.80	19871119	115.00	
								19880222	115.30	
								19880525	116.00	
								19880824	116.80	
	D-19-26 33CDA	4188.90	19490713	19490713	51.90	19800123	146.10	19880222	139.90	
	D-20-25 09CAA1	4559.20	19511108	19630219	153.12	19840606	414.40	19880222	217.20	
								19880525	229.40	
								19880824	255.00	
	D-20-26 23DAA	4168.00	19540119	19540119	78.40	19830216	116.90	19880222	108.90	
	D-20-26 25CBC	4160.00	19840313	19870219	112.20	19840907	145.38	19871119	115.70	
								19880222	115.10	
								19880525	114.80	
								19880824	115.10	
	D-21-25 15DBB	4218.55	19490310	19490310	109.75	19880222	146.37	19880222	146.37	
	D-21-26 02BAA	4130.00	19470826	19470826	36.60	19820826	116.90	19880222	103.20	
	D-21-26 02CCD	4138.00	19640408	19640408	85.00	19830216	131.30	19880222	120.00	
	D-21-26 22AAD	4136.96	19461022	19461022	68.70	19880224	334.40	19880224	334.40	
	D-21-26 24BAA	4196.00	19460131	19460131	112.00	19860206	193.20	19880222	186.60	
	D-21-26 32DAD	4075.00	194605	194605	41.21	19750220	81.90	19880222	69.10	
	D-21-26 36DDD	4200.00	19730209	19740117	210.80	19810129	236.50	19880223	223.50	
	D-22-25 14ACD	4138.00	19520129	19550111	89.13	19800128	111.70	19880223	100.70	
	D-22-26 02AAA	4165.00	19660216	19660216	159.90	19800125	203.60	19880222	194.40	
	D-22-26 04DAD	4095.00	19461022	19461022	60.54	19880525	127.80	19871119	120.30	P
								19880223	114.90	
								19880525	127.80	
								19880824	119.20	
	D-22-26 29BCC	4059.00	19520129	19520129	48.61	19750221	68.60	19880223	58.40	
	D-22-26 31CCD	4090.00	19460615	19460615	65.60	19840606	82.32	19871119	73.90	
								19880223	74.00	
								19880525	75.30	
								19880824	74.70	
	D-23-26 13CCC1	4010.00	19540119	19560109	53.32	19720124	68.39	19880223	63.60	
	D-23-27 09DAB	4055.00	19650522	19650522	116.00	19880824	188.60	19871119	186.30	
								19880223	185.00	
								19880824	188.60	
	D-23-27 19CBB	4002.00	19840313	19851202	57.70	19840606	75.50	19871119	61.50	
								19880223	59.90	
								19880525	59.90	
								19880824	60.30	
	D-23-27 22DDD	4042.00	19520107	19520107	125.86	19880223	198.30	19880223	198.30	
	D-23-28 08DDD	4259.00	19520107	19870819	62.50	19840907	74.29	19871119	62.90	
								19880223	63.80	
								19880525	64.00	
								19880824	64.10	
	D-23-28 31CCC	4040.00	197005	197005	196.00	19880824	248.40	19871119	246.20	
								19880223	246.90	
								19880525	247.60	
								19880824	248.40	
	D-24-27 05BDB	4000.00	19420526	19420526	54.30	19740117	71.90	19880223	69.50	
DUN	18S 20W 15 433A	4461.00	19560306	19870206	28.90	19560306	131.19	19880301	30.70	
	18S 21W 32 432	3730.00	19590112	19660108	26.97	19750117	30.08	19880202	29.95	
	19S 20W 18 131	3772.00	19580121	19660108	11.74	19580121	18.95	19880202	14.36	
	19S 20W 18 323	3790.00	19391118	19880310	2.99	19391118	11.95	19880310	2.99	
	19S 21W 03 412	3738.00	19590112	19660108	9.24	19660811	17.37	19880111	11.40	
	20S 21W 01 131	4153.00	19550615	19870203	319.20	19550615	323.07	19880523	319.20	
	20S 21W 17 111	3990.00	19860515	19870203	126.60	19860515	127.60	19880523	127.00	
	D-07-31 04BCC	3544.00	19391206	19680219	21.91	19560808	40.98	19880122	25.60	
	D-08-32 17DC	3705.00	19391103	19641012	57.52	19450808	69.68	19880122	64.00	
	D-08-32 34ADD	3730.00	19400130	19410506	38.12	19550630	82.23	19880122	42.10	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
GIL	C-02-04 26BDA	900.00	19570214	19570214	246.79	19750121	303.40	19880613	273.90	
	C-02-04 32ADA	820.00	19520401	19520401	187.15	19730213	250.70	19871228 19880613	207.90 216.90	
	C-02-05 26CBA	756.00	19660203	19810120	72.40	19660203	134.35	19871228 19880613	85.30 86.40	
	C-03-04 06BBA	748.00	19451218	19451218	62.50	19660114	170.20	19871228 19880613	109.30 117.20	
	C-03-04 09BAA	807.00	19510213	19510213	154.95	1961	324.14	19871228	198.70	
	C-03-04 10CAA2	859.00	19660119	19861216	242.40	19720112	299.60	19871228 19880613	251.10 255.10	
	C-03-04 17ADC	745.00	19610125	19861216	124.40	19610125	196.64	19871207 19880301 19880606 19880803	136.60 128.40 145.20 159.40	
	C-03-04 19CCD	700.00	19650617	19860211	38.80	19650617	139.60	19871228 19880613	65.20 71.10	
	C-03-04 23BAA	895.00	19530506	19530506	277.30	19670405	334.90	19871228 19880613	290.00 286.90	
	C-03-04 27BAA	812.00	19520401	19520401	191.50	19610119	324.02	19871228 19880613	208.60 217.50	
	C-03-04 33ADC	740.00	19790226	19861216	124.40	19830208	182.00	19871228 19880616	132.40 146.70	 S
	C-03-05 02CBB	735.00	19531230	19800321	12.00	19660111	119.05	19871228 19880613	31.30 63.80	
	C-04-04 08CCA	682.00	19660114	19860211	31.10	19660114	120.28	19871228	48.60	
	C-04-04 09BAA1	705.00	19530424	19530424	70.90	19710120	189.40	19871228	79.70	
	C-04-04 16DAD	695.00	19660105	19860211	79.90	19770111	198.80	19871228 19880616	93.60 100.60	
	C-04-04 27DAA	745.00	19660216	19860211	145.90	19870610	240.00	19871228	178.00	
	C-04-04 33ADD	697.00	19711201	19861216	91.70	19830208	143.30	19871228 19880616	98.30 120.[illegible]0	
	C-04-06 25BAC	641.00	19730214	19831114	53.69	19771213	107.70	19871223 19880614	65.50 68.80	
	C-04-06 36ADC2	605.00	19531228	19810128	2.80	19780209	67.40	19871223	29.50	
	C-04-07 34CDC	580.00	19530415	19840124	6.79	19771213	54.50	19871223 19880614	27.64 30.00	
	C-05-03 07ABA2	930.00	19790331	19870611	357.20	19790331	381.00	19871223 19880615	357.40 357.50	
	C-05-03 29AAA	1013.60	19790621	19880615	441.80	19800120	453.90	19871223 19880615	441.90 441.80	
	C-05-03 29CBC2	991.00	19810226	19880615	420.40	19810226	433.90	19871223 19880615	421.20 420.40	
	C-05-04 10CBC	740.00	19581030	19581030	139.96	19761208	196.00	19871228 19880616	150.09 173.10	
	C-05-04 18ADD	655.00	19530422	19530422	26.44	19771212	108.00	19871223	54.50	
	C-05-04 21CBD	738.00	19660216	19660216	165.85	19780323	206.50	19871228 19880616	175.40 132.00	
	C-05-04 31ADD	746.00	19660216	19660216	159.70	19790202	197.70	19871228	185.40	
	C-05-05 16CDC	627.00	19740312	19810225	15.60	19771228	63.00	19871223	42.40	
	C-05-05 19AAB	644.00	19771213	19840124	42.70	19880614	109.30	19871223 19880614	58.20 109.30	
	C-05-05 20DCD	655.00	19720106	19800320	65.92	19880614	153.50	19871223 19880614	82.82 153.50	
	C-05-06 02BBC	595.00	19660104	19840124	5.80	19720113	73.80	19871223	17.70	
	C-05-06 11CAA	610.00	19530411	19810129	4.00	19580123	83.80	19880614	33.89	
	C-05-06 17DAD	658.00	19771213	19790816	64.40	19771213	118.50	19871223 19880614	87.42 98.70	
	C-05-06 31CBB	718.00	19720105	19840124	151.10	19790816	244.00	19871223 19880614	165.30 185.00	
	C-06-04 12CDD	980.00	19660323	19660323	376.20	19850124	412.90	19871223 19880615	411.10 411.60	
	C-06-05 02DDD	755.00	19790301	19831110	175.60	19870611	195.90	19871223	191.40	
	C-06-05 04CBA	729.00	19790301	19800319	154.20	19870611	179.00	19871223	164.80	
	C-06-07 11CCC	718.00	19720105	19831216	136.40	19790816	232.70	19871223 19880614	154.30 169.90	
	C-07-06 04DDD	827.00	19650511	19650511	272.50	19750122	334.90	19871223 19880613	299.30 299.70	
	C-07-06 08CDD1	812.00	19660114	19680104	272.50	19811001	327.50	19871223 19880614	291.00 290.50	 S
	C-07-06 09CCC	818.00	19680104	19680104	281.12	19771214	305.50	19871223 19880613	293.00 294.00	
GRD	C-04-08 26DDD	550.00	19460124	19460124	49.30	19780109	70.10	19880125	61.40	
	C-04-08 35BDD	540.00	19530706	195401	44.75	19830113	79.60	19880125	57.50	
	C-04-10 02CBB	710.00	19850122	19880125	290.60	19870127	298.20	19880125	290.60	
	C-04-10 22ABB	608.00	19540119	19830114	101.10	19840129	174.90	19880125	136.40	
	C-04-11 15BAB	691.00	19670308	19670308	222.80	19810212	297.73	19880125	288.10	
	C-04-11 21BBB	674.00	197301	197301	254.40	19880125	274.20	19880125	274.20	
	C-05-11 03BBB	578.00	19830114	19830114	122.60	19850130	128.40	19880125	124.10	
	C-06-12 19BBA	383.00	19450504	19840126	22.80	19500316	44.86	19880122	24.90	
	C-07-11 27DDD	540.00	19830113	19870127	251.60	19850121	275.00	19880125	255.10	
	C-07-12 23CDD	520.00	19770208	19830113	201.10	19790108	261.38	19880125	205.40	
GSK	D-01-18 13BBA	2665.00	19590924	19810127	17.58	19600712	36.84	19880127 19880614	20.30 20.80	
	D-03-15 29ABA	2740.00	19520522	19740213	9.40	19570910	102.11	19880112	93.30	
	D-04-14 21BCD	1790.00	19520414	19740213	0.58	19531208	8.33	19880112	7.30	
GSK RES	D-01-18 14AAD	2662.00	19670302	19870122	19.20	19670302	38.70	19880127 19880614	20.60 21.00	
	D-01-18 24DDD	2600.00	19670302	19780328	5.20	19880614	9.00	19880614	9.00	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER LEVELS IN SELECTED WELLS IN GROUND-WATER AREAS IN ARIZONA

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
GTD	C-06-14 28BBA	405.00	19560816	19740104	74.53	19750109	139.86	19880122	101.60	
	C-07-16 24ADD	301.00	19621116	19750116	16.46	19830118	20.60	19880122	19.30	
	C-07-16 27CCC	280.00	19560313	19600303	3.87	19560313	18.88	19880122	6.70	
	C-07-16 33DAA	278.00	19640129	19760116	7.35	19640129	21.18	19880122	10.60	
	C-08-17 12DDD	263.00	19770209	19800208	5.49	19790109	15.19	19880122	10.30	
	C-08-17 20DCC	248.00	19760116	19800208	7.63	19780127	14.81	19880122	12.10	
	C-08-18 27AAD	231.00	19460205	19840126	1.90	19530212	27.06	19880122	2.20	
	C-09-19 04CDD	208.00	19460131	19800208	8.70	19460131	23.60	19880122	12.60	
	C-16-07 27BAD UNSURV	1355.00	19580612	19770928	15.20	19580612	36.00	19871014 19871216 19871229 19880217 19880510 19880728	26.20 27.50 27.50 27.90 28.70 29.30	
HAR	B-01-08 06AAA	1117.00	19610501	19610501	250.10	19841126	489.20	19871207 19880614	439.90 433.40	
	B-01-08 19CBC	1088.00	19791212	19880614	422.70	19811229	464.60	19871208 19880614	429.90 422.70	
	B-01-09 10BBB	1148.00	19580901	19580901	184.00	19811230	522.60	19871208 19880614	471.80 464.60	
	B-01-09 20BDC	1167.00	19791213	19880614	509.00	19851204	540.90	19871208 19880614	510.30 509.00	
	B-01-09 26CCC	1118.00	19750110	19750110	427.20	19841130	484.30	19871207 19880614	456.20 451.70	
	B-01-10 01CCC	1236.00	19530101	19530101	257.00	19791212	497.30	19871208 19880614	472.80 469.00	
	B-02-08 17CAA	1180.00	19631001	19631001	380.60	19841130	529.00	19871208 19880614	482.30 474.60	
	B-02-08 27BBA	1204.00	19631001	19631001	354.80	19851202	486.80	19871208 19880614	479.60 476.70	
	B-02-09 03BBB	1260.00	19711201	19711201	501.00	19841128	557.30	19871208 19880613	521.30 516.50	
	B-02-09 07ABB	1260.00	19520901	19520901	270.00	19841128	310.60	19871208 19880613	305.20 304.20	
	B-02-09 14BAB	1193.00	19791213	19880613	463.30	19841129	520.50	19880613	463.30	
	B-02-10 05ABB	1330.00	19630301	19630301	333.70	19880614	391.00	19871208 19880614	388.90 391.00	
	B-02-10 17DCA	1296.00	19780201	19780201	334.00	19870612	364.10	19871208	364.10	
	B-02-10 26DBB	1230.00	19841129	19841129	254.00	19871208	258.50	19871208 19880614	258.50 257.60	
	B-03-11 08CAC	1444.00	19580501	19580501	437.00	19880613	467.20	19871208 19880613	466.00 467.20	
	B-03-11 34BBB	1373.00	19780202	19780202	403.50	19880613	447.40	19871209 19880613	425.80 447.40	
	B-04-09 30AAC	1767.00	19830124	19860108	326.20	19860610	334.40	19871208 19880613	326.20 326.90	
	B-04-12 04CCA	1640.00	19630214	19710121	388.00	19871208	462.10	19871208	462.10	
	C-01-08 04BDA	1060.00	19631201	19631201	187.30	19851204	417.10	19871208 19880614	398.20 393.80	
	C-01-08 06DCC	1086.00	19590501	19590501	136.50	19841128	448.60	19871207 19880614	423.80 420.20	
	C-01-08 14DDD	990.00	19600401	19600401	32.00	19871208	251.00	19871208 19880614	251.00 249.80	
	C-01-08 16DCC	1035.00	19561201	19561201	74.00	19870612	356.80	19871208 19880614	355.60 356.50	
	C-01-09 11DCB	1158.00	19550412	19550412	195.70	19841129	532.90	19871207 19880614	504.10 496.70	
	C-01-09 18ACB	1305.00	19661101	19661101	495.00	19851204	680.10	19871207 19880106 19880303 19880613 19880809	664.60 663.80 662.30 659.60 657.80	
HAS	B-04-04 19BAA	1417.00	19821008	19850114	178.20	19880608	236.70	19871221 19880608	239.20 236.70	P
	B-04-05 05ABB	1620.00	19550302	19871221	379.80	19790313	383.20	19871221 19880608	379.80 380.40	
	B-05-04 24CCD	1720.00	197103	19860611	413.00	19800228	445.30	19871221 19880608	413.50 414.30	
	B-05-05 22BCC	1738.00	19690508	19880608	476.50	19771111	482.50	19871221 19880608	476.90 476.50	
	B-06-04 02CCC	1970.00	19771012	19880602	179.70	19771012	296.80	19871222 19880602	231.90 179.70	P
	B-06-04 03ABA	1980.00	19771012	19771012	81.00	19880106	113.70	19880106	113.70	
	B-06-04 03BAC2	1980.00	19771012	19880106	17.23	19771012	22.20	19880106	17.23	
	B-06-04 05CCC	2180.00	19780821	19880107	3.20	19780821	16.19	19880107	3.20	
	B-06-04 10ADA	1980.00	19771011	19830106	170.90	19771011	191.50	19880106	170.90	
	B-06-04 10DAB	1838.00	19771011	19880106	67.37	19771011	70.80	19880106	67.37	
	B-06-04 13AAB	2040.00	19770609	19880106	384.60	19770609	468.00	19880106	384.60	
	B-06-04 13DCD	1970.00	19770607	19861211	430.60	19800227	455.60	19871222 19880602	431.00 432.20	
	B-06-04 14AAC	1940.00	19771009	19880106	242.00	19771009	292.10	19880106	242.00	
	B-06-04 26BCD	1810.00	19770610	19770610	222.10	19880107	232.52	19880107	232.52	
	B-06-04 26DBC	1860.00	19771116	19880106	329.30	19771116	354.67	19880106	329.30	
	B-06-08 20ADC	2199.00	19570501	19820813	260.10	19801202	268.90	19871221	260.60	
	B-07-04 07BCC	2030.00	19780104	19850110	10.25	19780104	19.00	19880126	11.69	
	B-07-05 03BCC2	2180.00	19780511	19790313	117.44	19800227	129.50	19880128	123.41	
	B-08-05 10DAA	2580.00	19780426	19820218	411.60	19790314	425.30	19880126	422.60	
	B-08-05 18CCC	2455.00	19780202	19870115	323.80	19800227	332.40	19880128	324.00	
	B-08-05 19CBC	2425.00	19780131	19870115	288.70	19800227	302.00	19880128	289.50	
	B-09-05 35DBB	2640.00	19780223	19870115	403.90	19780223	409.00	19880126	404.30	
	B-09-06 05ADD	2955.00	19780207	19880209	821.70	19800410	825.20	19880209	821.70	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						STATUS
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	
HOL	A-15-23 24CCA	5300.00	19840110					19880413		F
	A-15-23 27DDD	5335.00	19530731	19541010	5.45	19780308	31.50	19880413	18.80	
	A-15-23 28DCC	5352.00	19500823	19500823	7.60	19671005	44.32	19880413	31.90	
	A-16-19 36CBC	5685.00	19680508	19740130	609.70	19860213	621.20	19880414	612.10	O
	A-16-22 17CCD	5180.00	19640924	19730319	48.22	19780111	62.70	19880413	51.40	
	A-17-20 10DBA	5060.00	19691107	19720202	7.70	19810123	16.45	19880415	14.40	
	A-17-20 26DBC	5360.00	19691202	19700301	296.68	19880414	299.30	19880414	299.30	
	A-17-21 10CBA	5165.00	19520703	19820224	49.50	19720310	55.90	19880414	53.70	
	A-18-19 17ADC	5015.00	19680220	19780111	32.30	19680904	61.55	19880415	59.60	
	A-18-19 23DBD	5030.00	19620306	19820224	24.15	19880415	36.60	19880415	35.60	
HOP	A-19-16 36DBB	4890.00	195711	19790209	30.89	195711	40.00	19880211	34.40	
HOP RES	07 093-06.25X03.85	6135.00	19720427	19720427	551.00	19871230	571.40	19871230	571.40	
HOU	A-41-08 23DAC	3917.00	19640930	19880115	344.00	19640930	721.00	19871015 19880115 19880419	344.60 344.00 344.10	
	A-42-08 36CBC	3735.84	19640702	19800717	40.00	19640702	388.00	19871015 19880115 19880420 19880517	51.70 43.00 56.33 54.50	
HUA	B-22-16 03CBB	3325.00	19800318	19800318	542.60	19880111	548.60	19880111	548.60	
	B-22-16 27DDD	3373.60	19860101	19860101	601.00	19880812	604.10	19880518 19880812	603.60 604.10	
	B-23-13 32ACA	3768.00	19440229	19440229	194.78	19780203	258.30	19880111	243.20	
	B-24-12 17CBC	4255.00	19530723	19790327	141.70	19550602	147.53	19880114	145.00	
	B-24-14 28CAD	3353.00	19431012	19440404	491.52	19851203	546.40	19880111	545.70	
	B-24-16 01DDD1	2961.00	19650428	19800128	440.70	19700127	453.60	19880113	451.00	
	B-26-18 03AAA1	3300.00	19800320	19800320	553.60	19860101	559.00	19880113	558.70	
	B-28-17 31CCC	3004.00	19650428	19840126	652.50	19650428	654.95	19880113	653.30	
	B-30-17 14DCC	3185.00	19800424	19830218	384.70	19800424	407.90	19880113	380.40	
KAN	B-40-04 06AAC	5140.00	19750722	19810107	79.20	19821201	83.40	19880518	[illegible]	
LHA	B-01-05 08DAB	1056.80	19560509	19561205	88.66	19850607	102.80	19871221 19880607	94.40 95.70	
	B-01-05 15CBB1	980.00	19620320	19871221	32.60	19630228	40.84	19871221 19880607	32.60 34.70	
	B-01-05 27BBC	977.30	19531201	19700123	63.70	19630205	75.69	19871221 19880607	70.30 71.40	
	B-01-06 01ABB	1082.00	19610331	19610331	105.22	19760109	130.00	19871218 19880607	111.70 113.30	
	B-01-06 03BBC	1069.00	19531216	19871218	99.93	19810317	112.40	19871218 19880607	99.40 100.40	
	B-01-06 11BCA	1040.70	19561205	19670224	80.23	19760109	95.90	19871218 19880607	83.40 84.50	
	B-01-06 23DCD	987.00	19680805	19680805	138.10	19880607	143.40	19871221 19880607	143.00 143.40	
	B-02-04 29DCD	1187.00	19521223	19521223	216.80	19851205	226.90	19871218 19880609	223.00 223.20	
	B-02-05 29DAC	1127.00	19620315	19620315	134.19	19880607	141.50	19871218 19880607	141.10 141.50	
	B-02-06 05DAA	1201.00	19610324	19610324	228.16	19860611	355.70	19871216 19880607	343.20 379.50	P
	B-02-06 09CBB	1175.00	19820122	19861208	297.10	19850606	342.60	19871218 19880607	303.70 379.80	F
	B-02-06 21BBA	1136.00	19610324	19610324	183.64	19850606	293.40	19871218 19880607	247.30 263.50	
	B-02-06 33CAA	1075.00	19550526	19550526	111.36	19850606	264.80	19871218 19880607	238.20 226.80	
	B-02-07 05BBC	1340.00	19700115	19700115	394.60	19880607	451.70	19871218 19880607	453.50 451.70	
	B-02-07 23CCA	1140.00	19610321	19610321	186.45	19870903	292.20	19871207 19871216 19880301 19880603 19880818	284.60 283.60 283.20 283.60 283.10	
	B-02-07 27AAB	1146.20	19531203	19531203	162.83	19860609	299.60	19871218 19880607	290.30 293.60	
	B-03-06 30BAD	1322.00	19700115	19700115	382.90	19880105	457.30	19880105	457.30	
	C-01-05 03BAA1	931.00	19511109	19520131	68.60	19700115	137.10	19871221 19880607	94.00 97.50	
	C-01-05 29ADC	788.00	19560116	19790406	38.42	19630205	79.94	19871228 19880609	41.00 45.40	
	C-01-05 34ADC1	778.00	19560116	19851203	17.00	19690129	49.53	19871221 19880609	17.10 16.70	
	C-01-06 14DBB	891.20	19531201	19531201	157.44	19860609	258.10	19871221 19880609	203.90 259.20	P
	C-01-06 18BEB	911.80	19531201	19531201	168.72	19811215	268.92	19871221	247.20	
	C-01-06 19ABB	890.00	19610405	19610405	174.56	19810129	239.90	19871221 19880609	219.30 219.40	
	C 01 07 14BBB	939.00	19630311	19630311	204.68	19851203	271.80	19871221 19880609	266.50 266.00	
	C-02-05 08CCC	779.00	19700113	19880609	43.00	19700113	61.80	19871228 19880609	43.20 43.00	
	C-02-05 16DAA	762.00	19560116	19860109	12.50	19700113	32.50	19871221 19880609	15.40 16.40	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
LIC	B-14-02 14BAD	5170.00	19810120	19850306	16.97	19810721	30.00	19880225	22.60	
								19880913	24.73	
	B-15-01 01CDC	4913.00	19630326	19630326	344.60	19810618	376.68	19880223	365.80	
								19880913	365.30	
	B-15-01 25CDB	4927.00	19810206	19811022	287.20	19880913	291.50	19880223	290.90	
								19880913	291.50	
	B-15-02 17ABA	5056.00	19400317	19870223	298.60	19620426	306.91	19880225	299.00	
								19880913	299.10	
	B-16-02 03BAC	4535.00	19390411	19390411	-71.00	19640909	19.50	19880224	4.25	
								19880913	8.56	
	B-16-02 03BBB1	4539.00	19801023	19801023	34.50	19850827	53.22	19880224	48.90	
								19880913	52.76	
	B-16-02 03DDC4	4590.00	19801024	19820825	9.24	19880224	29.30	19880224	29.30	
								19880913	26.12	
	B-16-02 11CBB1	4610.00	19380421	19820825	11.67	19380421	51.77	19880223	38.44	
								19880913	46.93	
	B-16-02 17BDC	4700.00	19810210	19870401	161.10	19810820	182.50	19880224	162.20	
								19880913	164.90	
	B-16-02 21BAA1	4738.00	194803	194803	152.29	1975	236.64	19880224	212.70	
								19880913	216.30	
	B-16-02 34ABA2	4800.00	19830824	19880223	261.70	19850826	276.00	19880223	261.70	
								19880913	264.30	
	B-17-02 35CCC2	4515.00	19840106	19870331	0.	19870605	76.90	19871028	8.00	
								19880224	2.25	
								19880502	9.20	
								19880525	79.00	P
								19880804	11.45	
								19880913	83.00	P
	B-17-02N34ACC	4510.00	19401022	19800401	3.65	19801118	13.70	19880224	6.29	
								19880913	7.73	
	B-17-02N34DDD1	4513.00	19431015	19440407	-51.46	19820621	21.67	19871028	1.17	
								19880525	0.20	
								19880913	1.00	
	B-17-02S34ABA	4512.00	19630904	19880224	1.80	19630904	7.95	19880224	1.80	
								19880525	2.30	
								19880804	2.00	
								19880913	1.90	
	B-17-02W27DCC	4470.00	19620321	19650322	2.10	19820521	17.95	19880224	9.70	
								19880913	13.94	
LSC	D-03-02 23DAA	1095.00	19821222	19870611	76.40	19821222	90.00	19871217	78.30	
								19880606	77.20	
	D-03-02 23DCA	1108.00	19821222	19870611	104.30	19821222	116.90	19871217	106.10	
								19880606	105.70	
	D-03-05 01DDA	1243.00	19851213	19871214	161.80	19860527	206.00	19871214	161.80	
	D-03-05 29BCB	1197.00	19460101	19460101	29.00	19830105	100.40	19871215	62.20	P
								19880610	60.70	
	D-03-06 17BDD	1288.00	19830113	19861201	134.70	19830113	195.60	19871214	135.20	
								19880610	164.40	
	D-04-02 15CBC	1227.00	19510212	19510212	109.50	19780110	368.70	19871216	348.40	
								19880606	348.60	
	D-04-02 23ACC	1187.00	19530217	19530217	94.30	19780110	496.20	19871216	488.90	
								19880606	534.00	P
	D-04-03 13DDD	1177.00	19580115	19580115	114.61	19870609	301.90	19871215	275.20	
	D-04-03 15DCC	1162.00	19540216	19540216	61.20	19800102	166.60	19871215	125.30	
								19880531	150.10	S
	D-04-03 16CBB	1152.00	19530217	19530217	43.50	19860610	164.80	19871216	153.10	
								19880606	192.40	P
								19880721	200.50	P
	D-04-03 20DCD	1155.00	19520205	19520205	53.41	19871216	225.90	19871216	225.90	
								19880606	249.10	P
	D-04-03 35DDD	1200.00	19500308	19500308	73.90	19850621	291.30	19871216	219.10	
								19880531	353.20	P
	D-04-04 16CDD	1189.00	19500308	19510212	69.11	19770106	291.50	19871215	238.20	
								19880531	347.00	P
	D-04-04 20CDD	1193.00	19630124	19861211	160.90	19870609	194.40	19871215	161.70	
								19880531	186.80	
	D-04-04 22DDD1	1234.00	19520204	19520204	119.19	19841115	367.80	19880614	347.80	
	D-04-04 31DDD	1210.00	19520205	19520205	92.12	19880223	198.00	19880223	198.00	
								19880614	460.40	P
	D-04-09 33AAD	1456.00	19841108	19880607	163.10	19841108	163.30	19880607	163.10	
	D-04-10 30BDD	1490.00	19520206	19520206	83.21	19780125	177.70	19871216	129.70	
								19880607	136.70	
	D-04-11 07DBB	1560.00	19770105	19851219	17.30	19770105	47.50	19871216	18.00	
								19880607	45.30	P
	D-05-02 02DCD	1241.00	19700106	19700106	474.60	19880606	598.50	19871216	595.80	
								19880606	598.50	
	D-05-02 22DAD	1322.00	19710107	19710107	570.50	19861217	609.20	19871216	608.60	
								19880606	609.20	
	D-05-02 36BAD	1317.00	19580222	19580222	320.00	19841114	695.70	19871207	686.10	
								19880302	684.30	
								19880602	687.40	
								19880808	692.00	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
LSC--Cont.	D-05-03 03CCC	1195.00	19830119	19851217	201.80	19861212	215.20	19871216 19880606	210.70 436.50	 P
	D-05-03 12CDD1	1215.00	19550120	19550120	130.22	19870609	240.30	19880223 19880531	228.50 237.70	S S
	D-05-03 25ADD	1240.00	19510202	19510202	119.45	19790207	277.80	19871215 19880531	230.90 227.60	
	D-05-03 29BCC1	1257.00	19471201	19471201	190.00	19880808	328.30	19871202 19880302 19880602 19880808	326.90 327.00 327.90 328.30	
	D-05-03 33DCB2	1245.00	19690115	19690115	472.65	19860611	634.40	19871216 19880606 19880614	610.[illegible] 611.00 229.20	
	D-05-04 15ADD	1266.00	19830113	19880714	472.40	19841107	539.00	19880614	472.40	
	D-05-04 19DD UNSRV	1250.00	19841112	19841112	218.20	19841112	218.20	19880223	217.50	S
	D-05-04 23BDD2	1275.00	19561018	19561018	262.60	19830119	596.80	19880614	591.70	
	D-05-04 28BCD2	1250.00	19830120	19880223	548.60	19830120	596.50	19880223 19880513	548.60 679.50	 P
	D-05-05 32CAB	1332.00	19540216	19540216	164.42	19871218	339.80	19871218 19880601	339.80 339.30	
	D-05-06 28CAA	1465.00	19710106	19710106	242.47	19841029	338.20	19871218 19880601	337.00 337.90	
	D-05-07 26CDD	1401.00	[illegible]	19880613	133.90	19841029	163.40	19880613	133.90	
	D-05-07 28DCC2	1412.00	19630123	19871223	172.50	19680123	209.35	19871223 19880601	172.50 163.90	 S
	D-05-07 33DDD	1402.00	19490302	19490302	73.00	19860612	207.30	19871223 19880601	159.40 164.60	
	D-05-07 34DDD	1406.00	19490228	19490228	85.90	19860612	199.40	19871223 19880601	147.90 179.00	 P
	D-05-07W13DAC	1386.00	19830127	19871223	95.20	19830127	117.30	19871223 19880602	95.20 95.60	
	D-05-08 02AAA	1419.00	19770104	19851218	66.70	19770104	176.80	19871216 19880607	96.00 118.20	 S
	D-05-08 12AAD	1416.00	19510222	19851219	45.80	19770105	158.60	19871216 19880607	127.10 314.30	 P
	D-05-08 31DDD	1417.00	19540226	[illegible]	115.52	19641223	209.10	19871223 19880602	115.60 126.10	
	D-05-09 03DAB	1475.00	19530217	19530217	97.97	19770105	239.30	19871216 19880607	169.90 172.70	
	D-05-09 18BDD1	1484.00	[illegible]	19851219	133.40	19880607	177.10	19871216 19880607	143.60 177.10	
	D-05-09 22CBA	1524.00	19540116	[illegible]	174.80	19871216	360.00	19871216 19880607	360.00 367.60	 P
	D-05-09 29ADA	1520.00	19420614	[illegible]	114.24	19751026	244.30	19871223 19880607	176.80 167.50	
	D-05-09 31ADD	1505.00	[illegible]	19520217	158.24	19841114	208.90	19871223 19880607	194.30 286.30	 P
	D-06-02E01CDD2	1318.00	19841123	19880606	692.50	19841120	710.20	19871216 19880606	694.50 692.50	
	D-06-03 11CDD1	1275.00	19510103	19510103	140.54	19880606	213.80	19871215 19880606	212.90 213.80	
	D-06-03 15BDC	1202.00	[illegible]	[illegible]	639.40	19860611	666.50	19871216 19880606	645.20 639.90	
	D-06-03 27CCC	1365.00	19770104	19770104	[illegible]	19851218	757.50	19871216 19880606	737.40 733.30	
	D-06-03S02DDD2	1267.00	19710111	[illegible]	194.20	19770103	291.80	19871215 19880531	234.60 239.50	
	D-06-04 02CDD	1295.00	19710107	[illegible]	472.73	19820115	585.10	19871216 19880531	559.00 561.50	
	D-06-04 07CCC	1289.00	19420312	19420312	111.20	19880531	266.60	19871215 19880531	263.10 266.60	
	D-06-04 36DDD	1347.00	19560103	19560103	235.00	19851218	517.70	19871216 19880606	515.40 513.00	
	D-06-04S04DDD3	1266.00	19841112	19841112	233.23	19871216	244.30	19871216 19880531	244.30 269.50	 P
	D-06-04S06DDD	1277.00	19580115	19580115	223.20	19841107	606.90	19871216 19880531	588.40 603.00	
	D-06-05 09ADD	1332.00	19400326	19430506	42.17	19570118	56.86	19871218 19880601	43.90 45.70	
	D-06-05 16DAD1	1347.00	19510201	19871218	40.40	19560126	98.60	19871218 19880601	40.40 58.50	 P
	D-06-05 19DDA PZ1	1338.00	19650622	19650622	327.20	19720925	348.20	19871218 19880601	328.60 328.20	
	D-06-05 19DDA PZ2	1338.00	19711027	19871218	312.60	19711027	336.05	19871218 19880601	312.60 314.20	
	D-06-05 25BBB	1377.00	19460101	19861208	27.90	19550119	67.08	19871218 19880601	27.90 30.00	
	D-06-05 34BDD	1369.00	19490302	19770210	58.50	19540215	95.04	19871218 19880602	62.30 62.90	
	D-06-06 07AAA3	1385.00	19600125	19600125	114.19	19810121	203.10	19871218 19880601	171.70 172.40	
	D-06-06 09DAD	1395.00	19840207	19870604	300.10	19841031	316.60	19871218 19880601 19880818	305.80 304.00 489.70	 P

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
LSC-- Cont.	D-06-06 12BDB	1416.00	19510201	19510201	59.28	19670126	176.51	19871223	140.06	
								19880601	142.70	
	D-06-06 14DDD2	1415.00	19841107	19841107	306.90	19880609	346.80	19880609	346.80	
	D-06-06 16ADD	1398.00	19630425	19630425	60.00	19841031	321.80	19871218	313.00	
								19880601	307.40	
	D-06-06 16CDD	1398.00	19840208	19880601	181.40	19840208	205.60	19871218	186.70	
								19880601	181.40	
	D-06-06 23ADC	1417.00	19841107	19841107	303.50	19880609	351.60	19880609	351.60	
	D-06-07 11DDD2	1431.00	19490228	19490228	96.18	19750306	240.50	19871223	146.80	
								19880602	167.40	
	D-06-07 34BBC	1461.00	19770107	19871223	227.20	19880602	295.50	19871223	227.20	
								19880602	295.50	
	D-06-07 35DDD	1477.00	19770107	19770107	234.00	19880602	417.80	19871223	351.60	
								19880602	417.80	
	D-06-08 11ADA1	1473.00	19830110	19871223	97.80	19851218	136.60	19871223	97.80	
								19880607	102.80	
	D-06-08 14CCC	1456.00	19770118	19871223	116.20	19770118	190.30	19871223	116.20	
								19880607	152.40	
								19880816	259.40	P
	D-06-08 27BDD2	1470.00	19841113	19871223	135.40	19860612	183.50	19871223	135.40	
								19880602	166.20	
	D-06-08 31CDD	1485.00	19490217	19490217	121.30	19751124	206.00	19871223	188.90	
								19880602	190.30	
	D-06-08S02DAD	1472.00	19510221	19510221	107.85	19770117	185.60	19871223	131.40	
								19880607	154.00	
	D-06-08S04ADD1	1432.00	19411031	19411229	53.14	19680123	175.30	19871223	103.60	
								19880602	120.90	S
	D-06-09 19BBD	1517.00	19520306	19520306	102.00	19770117	192.20	19871223	127.80	
								19880607	129.60	
	D-06-09N04DDD	1588.00	19490928	19520306	193.82	19750307	312.00	19880607	294.00	
	D-06-09N06DAA	1522.00	19520306	19540217	160.92	19870616	261.30	19871223	222.50	
	D-07-03 21DBC	1678.00	19841119	19841119	71.29	19880614	80.40	19880614	80.40	
	D-07-04 23DDD	1360.00	19851217	19880706	441.60	19851217	470.80	19871216	446.10	
								19880606	441.60	
	D-07-05 01ADA	1402.00	19841105	19880613	30.40	19841105	34.00	19880613	30.40	
	D-07-05 07DDD	1368.00	19520208	19520208	177.94	19880613	452.30	19880613	452.30	
	D-07-06 04DCC	1430.00	19841102	19880713	69.30	19841102	76.20	19880613	69.30	
	D-07-06 17DDD2	1440.00	19490208	19500309	62.90	19670119	119.55	19871218	107.90	
								19880602	113.20	
	D-07-06 26DDD	1485.00	19480813	19480813	81.35	19670119	185.95	19871217	177.50	
								19880602	179.00	
	D-07-07 02ACC	1482.00	19440822	19441226	91.46	19841119	222.60	19871223	196.20	
								19880602	189.90	
	D-07-07 08BAA	1468.00	19690122	19861208	293.50	19820122	393.00	19880602	331.60	
	D-07-07 11CDD	1494.00	19420311	19420311	85.93	19850620	299.70	19871223	250.70	
								19880602	248.90	
	D-07-07 24DDD	1523.00	19490217	19490217	161.40	19860611	314.80	19871222	265.10	
								19880602	279.60	
	D-07-07 34CDD2	1529.00	19520206	19520206	170.17	19810120	279.80	19871222	270.40	
								19880602	273.70	
	D-07-08 05DCC	1501.00	19490217	19490217	127.46	19700106	265.61	19871223	203.50	
								19880602	218.00	
	D-07-08 09DDD	1515.00	19770118	19871223	212.20	19770118	260.80	19871223	212.20	
								19880602	216.90	
	D-07-08 17CDD	1522.00	19751121	19871223	253.90	19751121	311.00	19871223	253.90	
								19880602	268.20	S
	D-07-08 30CDD	1536.00	19490217	19490217	167.11	19860611	315.70	19871222	267.10	
								19880602	383.20	P
	D-07-08 31BBA	1534.00	19650308	19680124	300.40	19850620	381.20	19871222	325.00	
								19880602	343.30	S
	D-07-13 15DAA1	3600.00	19521015	19831209	7.13	19521015	53.73	19871204	21.40	
								19880603	22.60	
	D-08-06 14CDD	1512.00	19821216	19821216	185.30	19841109	398.60	19880223	295.70	
	D-08-06 22DDD2	1518.00	19851217	19871222	185.00	19860611	194.90	19871222	185.00	
	D-08-06 35DDD2	1542.00	19490207	19490207	100.80	19820118	200.29	19871222	171.00	
								19880608	172.80	
	D-08-07 09ADD1	1538.00	19410324	19410324	94.06	19810105	287.20	19871222	259.80	
								19880608	267.80	
	D-08-07 14DDA	1565.00	19770123	19770123	379.60	19860611	446.30	19871222	401.30	
	D-08-07 19DDD	1548.00	19520204	19520204	159.04	19700514	229.70	19871222	223.40	
								19880608	227.30	
	D-08-08 01DDD	1599.00	19520220	19520220	204.40	19851218	419.60	19871222	408.90	
	D-08-08 07DDD1	1585.00	19410819	19420305	126.50	19870605	245.70	19871222	236.60	
								19880607	237.00	
	D-08-08 07DDD2	1575.00	19841031	19861211	359.40	19880607	403.10	19871222	361.80	
								19880607	403.10	
	D-08-08 10CDD	1587.00	19490207	19500215	186.54	19841112	414.80	19871222	390.00	
								19880607	539.90	P
	D-08-08 14DDD	1611.00	19490222	19490222	188.04	19841112	464.40	19871223	447.50	
								19880609	551.00	P
	D-08-08 18CDD1	1583.00	19420305	19420305	135.51	19770114	397.40	19871222	329.30	
								19880607	342.50	S
	D-08-08 29BCC	1607.00	19841112	19851217	441.30	19841112	453.60	19871222	447.30	
	D-08-08 31DAA	1617.00	19841101	19841101	365.90	19880223	375.70	19880223	375.70	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
LSC--Cont.	D-08-09 07ADD	1635.00	19810218	19831209	443.50	19861212	473.90	19871222 19880609	471.60 562.90	P
	D-08-10 04BBB2	1939.00	19650304	19670221	307.01	19801211	364.80	19871204 19880603	346.70 346.90	
	D-08-11 31BBB	2105.00	19680510	19760122	431.30	19880603	446.00	19871204 19880603	445.60 446.00	
	D-08-12 19DDC	2680.00	19521007	19831208	3.11	19560925	16.94	19871204 19880603	11.50 15.60	P
	D-09-07 04ADD	1584.00	19570117	19570117	219.40	19860611	271.00	19871222 19880608	260.80 269.00	
	D-09-07 16DDD2	1597.00	19841105	19841105	507.20	19880608	557.90	19880608	557.90	
	D-09-07 25CDD	1646.00	19821215	19871222	398.10	19870605	427.70	19871222 19880608	398.10 441.30	S
	D-09-07 25DDA1	1652.00	19560118	19560118	232.05	19841119	283.00	19871222 19880608	265.40 270.20	S
	D-09-07 25DDA2	1652.00	19841119	19851119	488.60	19870605	546.20	19871222 19880608	490.90 727.10	P
	D-09-07 27DDD1	1623.00	19460701	19460701	182.00	19841119	234.70	19871222 19880608	231.30 233.70	
	D-09-07 27DDD3	1623.00	19770125	19770125	453.30	19841119	517.30	19880223	488.20	
	D-09-08 06DDD	1641.00	19420304	19420304	152.00	19800116	387.30	19871222	370.60	
	D-09-08 17CDD	1666.00	19420306	19420306	165.00	19870902	411.30	19871204 19871222 19880229 19880602 19880808	384.30 381.10 396.70 399.10 409.60	
	D-09-08 20ADD	1666.00	19400426	19410324	151.54	19841106	505.80	19871222 19880609	446.10 484.40	S
	D-09-08 20ADD2	1666.00	19841106	19841106	453.10	19871222	506.30	19871222	506.30	
	D-09-08 30DDD1	1668.00	19690123	19871222	316.50	19690123	354.70	19871222 19880608	316.50 324.40	S
	D-09-08 35ADD2	1713.00	19841115	19870605	301.70	19880608	523.10	19871222 19880608	479.90 523.10	
	D-09-10 19AAA	1840.00	19530210	19550328	181.10	19680117	226.70	19880223 19880603	200.60 205.10	S
	D-09-10 19ADD	1836.00	19531216	19531216	188.67	19800110	291.85	19880223 19880603	246.10 277.80	S
	D-09-13 07CBC	3115.00	19521002	19550923	43.03	19530106	111.53	19871204 19880603	61.60 57.80	
	D-09-13 20DBA	3360.00	19820127	19880603	310.70	19820127	319.50	19871204 19880603	311.00 310.70	
	D-09-13 27CBA	3515.00	19670710	19871203	442.20	19701030	448.10	19871203	442.20	
	D-10-09 10AAD1	1800.00	19551206	19551206	226.58	19770211	345.30	19880223 19880609	294.20 317.80	S
	D-10-09 18AAC2	1764.00	19770107	19880223	315.50	19811206	318.60	19880223 19880609	315.10 316.00	
	D-10-09 21AAD	1797.00	19480712	19480712	153.84	19810106	273.20	19880609	268.80	
	D-10-10 05DAD	1855.00	19481112	19481112	157.55	19870603	244.50	19880223 19880603	233.10 243.30	
	D-10-10 20DCC	1862.00	19490118	19490118	155.43	19730118	226.00	19880223 19880603	206.00 207.40	
	D-10-11 17CAB2	2140.00	19841023	19841023	467.40	19860527	468.80	19880223 19880603	468.10 468.40	
	D-11-10 13AAA1	1925.00	196012	196012	209.50	19661213	253.20	19871203	226.70	
	D-11-10 15AAD	1909.00	19521212	19521212	167.09	19770106	228.00	19871214	214.60	
	D-11-10 24AAA	1935.00	19471009	19480225	158.80	19770105	294.50	19871203	256.70	
	D-11-11 07DDD	1941.00	19631212	19631212	252.65	19841126	277.50	19871203	267.00	
	D-11-11 11DCD	2148.00	19581212	19581212	379.42	19841127	454.20	19880223 19880603	452.90 451.70	
	D-11-11 16CDD2	1968.00	19841126	19871203	287.10	19841126	298.60	19871203 19880601	287.10 289.60	
	D-11-11 18DDD	1945.00	19470101	19470101	169.90	19841126	280.80	19871203	269.50	
	D-11-11 28ACC1	1980.00	19490301	19490301	193.00	19840130	303.20	19871207	290.20	
	D-11-11 34DDD	2012.30	19510317	19510317	213.00	19841127	311.60	19871203	298.40	
	D-11-11 35DDD	2026.10	19490301	19490301	190.00	19871203	255.70	19871203	255.70	
	D-12-11 12BDC	2060.00	19520901	19520901	227.00	19821220	353.30	19871207 19880602	281.00 324.70	P
	D-12-12 16CBC	2090.00	19470401	19841127	102.00	19470401	110.00	19871208	107.90	
LSC RES	D-03-04 35DCB	1188.00	19830107	19871215	107.80	19880610	139.70	19871215 19880610	107.80 139.70	
	D-04-03 09CDD PZ1	1147.00	19720301	19860610	141.00	19720301	241.70	19871216 19880606	146.50 150.80	S
	D-04-03 09CDD PZ2	1147.00	19650101	19650101	123.00	19870609	248.20	19871216	164.40	
	D-04-04 07CDD	1170.00	19830106	19831116	233.30	19830106	240.10	19880223	198.50	S
	D-04-05 02BCB	1225.00	19830114	19871215	52.70	19830114	94.00	19871215 19880610	52.70 57.40	
	D-04-05 15BAD	1292.00	19830107	19871215	84.00	19830107	132.20	19871215 19880610	84.00 87.90	
	D-04-06 05ADD	1254.00	19830112	19860527	66.60	19830112	110.40	19871215 19880610	69.40 95.00	P
	D-04-06 23BAA	1287.00	13620516	19850627	42.90	19830112	92.90	19871215 19880610	56.00 86.00	P
	D-04-08 02CCC	1532.00	19410612	19410612	157.96	19700211	242.80	19871228 19880607	240.10 239.00	
	D-09-05 29CDC	1528.77	19481001	19481001	74.89	19780721	96.70	19880113	78.20	
	D-10-04 33DDC1	1597.60	19531124	19570613	161.95	19860321	197.50	19880113	175.70	
	D-12-03 23AAD UNSURV	1760.62	1915	1915	238.00	19700120	256.00	19880113	238.80	
	D-15-07 18CBB2	2520.00	196804	19771214	547.50	19751103	578.50	19871211	554.90	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
LSP	D-05-15 25BCD	1950.00	19500308	19740213	14.80	19730129	26.80	19880112	15.80	
	D-06-16 08DAC5	2040.00	19580308	19880112	35.00	19810131	41.00	19880112	35.00	
	D-07-16 22ADD	2206.36	19490922	19830107	12.80	19560712	31.30	19880112	14.20	
	D-08-16 25DCD	2910.00	194807	194807	375.00	19780106	496.70	19880113	490.90	
	D-08-17 18BAA	2322.00	19510209	19840104	14.10	19761228	48.20	19880113	29.80	
	D-09-15 36BBC	4500.00	1943	19790206	19.40	19570513	83.01	19880113	27.40	
	D-09-17 04ADA	2448.39	19540330	19790207	35.80	19810207	48.80	19880113	41.60	
	D-12-18 24AAB	2940.00	19660408	19850108	33.00	19740212	75.40	19880113	53.80	
	D-12-19 19ADB	3000.00	19491207	19840111	19.50	19761217	53.60	19880113	41.80	
	D-13-18 02BDD	3240.00	19680419	19790209	45.00	19730123	165.30	19880113	107.90	
	D-13-19 12DCC	3233.71	195011	19860407	22.80	196303	70.40	19880113	47.50	
	D-13-19 25BBB	3153.02	195006	19860331	25.00	195008	55.00	19880113	31.40	
	D-14-20 34CAA	3377.00	19491207	19560716	107.85	19791207	121.60	19880113	116.30	
	D-15-20 10CA3	3319.00	19620509	19790213	36.30	19760126	47.10	19880113	42.10	
LVR	A-03-06 15ABA	1674.00	197006	197006	331.00	19880613	354.40	19871221	352.40	
								19880613	354.40	
	A-03-07 30BAD	1365.00	19850620	19851212	10.80	19870603	17.67	19871221	13.90	
								19880613	15.80	
	A-04-07 07BBA	1630.00	19760226	19851212	138.00	19850620	189.90	19871221	140.80	
	A-05-06 31DDD	2351.00	19830113	19830113	489.70	19880613	586.80	19871222	536.50	
								19880613	586.80	
	A-10-10 04ABA	4940.00	19750702	19790507	22.87	19841124	131.30	19871124	85.00	
								19880316	75.70	
								19880602	78.90	
	A-10-10 04DBA	4960.00	19780123	19790406	66.94	19861124	131.30	19871124	126.90	
								19880316	116.50	
								19880602	120.40	
	A-10-10 05CCA	4820.00	19750703	19790507	18.45	19811119	28.06	19871124	25.86	
								19880316	23.79	
								19880602	23.24	
	A-10-10 05CCB	4800.00	19751016	19780302	14.00	19820610	22.27	19871124	19.32	
								19880316	18.89	
								19880602	18.97	
	A-10-10 10BCB	4980.00	197407	19850524	43.75	197407	65.00	19871124	55.50	
								19880316	55.02	
								19880602	53.44	
	A-11-10 27CCB	5000.00	19630418	19630418	92.00	19750702	197.00	19871124	119.00	
								19880316	117.30	
								19880602	116.20	
	A-11-10 27DDB	5052.00	19750701	19860114	87.60	19790412	128.70	19880127	89.40	
	A-11-10 31DAC	5060.00	19750701	19850524	156.14	19780201	170.80	19871124	159.60	
								19880316	157.50	
								19880602	159.01	
	A-11-10 32ACD	5140.00	19811217	19880316	242.30	19811217	263.92	19871124	243.20	
								19880316	242.30	
								19880602	243.90	
	A-11-10 35CCC	5060.00	19820119	19820119	83.44	19880602	96.30	19871124	95.20	
								19880316	93.70	
								19880602	96.30	
MMU	B-05-12 30DDD	1739.00	19530227	19731207	88.40	19700220	122.60	19871209	111.00	
	B-05-12 32ADB	1697.00	19530227	19530227	52.55	19710121	103.90	19871209	102.00	
	B-05-13 01ACB	1862.00	19801204	19801204	365.40	19851202	376.30	19871210	366.80	
	B-05-13 05CBB	2018.00	195607	195807	259.00	19871210	468.10	19871210	468.10	
	B-05-13 08DAA	1922.00	19620330	19620330	181.79	19851202	421.50	19871210	416.30	
	B-05-13 19BBD2	1955.00	19801205	19860101	293.00	19871210	329.30	19871210	329.30	
	B-05-13 28ACC	1918.30	19561123	19571011	194.44	19801209	272.00	19871209	269.40	
	B-06-11 05ADD	1992.00	19460327	19460327	16.00	19880828	225.90	19871210	224.80	
								19880828	225.90	
	B-06-12 13DCD	1976.00	19570507	19570507	171.58	19850228	454.60	19871211	450.50	
	B-06-12 15BBB	1955.00	19580424	19600418	185.50	19871210	355.90	19871210	355.90	
	B-06-12 19BBA	1967.00	19651204	19651204	242.60	19851202	437.10	19871210	433.35	V
	B-06-13 28DBD2	2009.00	19810825	19810825	479.30	19871210	513.20	19871210	513.20	
	B-07-07 17DCC	2409.00	19731004	19860101	465.00	19871211	485.00	19871211	485.00	
	B-07-08 15BAA	2257.00	19590401	19590401	457.85	19871211	590.40	19871211	590.40	
	B-07-08 20DDD	2224.00	19580930	19580930	412.30	19871211	612.50	19871211	612.50	
	B-07-09 33ABB	2235.00	19801230	19801230	560.60	19871210	599.80	19871210	599.80	
	B-07-10 13CDD	2109.65	19580911	19580911	304.02	19871210	448.30	19871210	448.30	
	B-07-10 13AAA	2054.00	19801210	19801210	327.60	19871210	347.80	19871210	347.80	
	B-07-12 26BCC	2098.00	19810825	19810825	320.00	19830127	322.00	19871210	320.90	
	B-08-07 33ABC	2426.00	19801117	19860101	412.00	19820107	413.90	19871211	412.70	
	B-08-09 28ABB	2191.00	19801118	19861208	510.90	19801118	530.30	19871210	511.20	
	B-08-10 36BBB	2198.00	19580530	19580530	392.68	19871210	510.70	19871210	510.70	
N-C	A-04-01 01BAA	1381.00	19821028	19841206	351.20	19871222	355.10	19871222	355.10	
	A-04-02 11ADB	1430.00	19700408	19700408	362.30	19850625	369.40	19871222	363.00	
								19880607	365.60	
	A-04-02 14BBB	1397.00	19481115	19481115	278.20	19821020	486.80	19871222	476.30	
								19880606	477.70	
	A-04-04 06BBB	1730.00	197801	197801	491.00	19880810	526.50	19871005	523.10	
								19871029	523.40	
								19871223	523.30	
								19880302	524.60	
								19880601	526.10	
								19880810	526.50	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
N-C--Cont.	A-05-01 10AAB	1574.00	19820902	19861203	210.30	19870609	239.80	19871223	211.80	
								19880606	212.50	
	A-05-02 04CAB	1615.00	19820827	19871216	217.90	19870609	220.60	19871216	217.90	
								19880606	257.90	P
	A-05-02 10ABA	1650.00	19770518	19830105	287.60	19770518	291.00	19871216	288.80	
								19880606	288.50	
	A-05-04 09ABB	2125.00	19850102	19871222	587.90	19850102	603.00	19871222	587.90	
								19880609	589.10	
	A-06-02 25BDD1	1822.00	19770419	19880606	279.10	19820114	290.60	19871216	279.90	
								19880606	279.10	
	A-06-02 30AAA	1721.00	19790330	19880606	193.20	19810305	214.00	19871222	193.70	
								19880606	193.20	
	A-06-04 21DAC	2180.00	19761110	19810310	65.40	19871223	121.80	19871223	121.80	
	A-06-05 31CCC2	2558.00	19820114	19830427	222.80	19871222	271.20	19871222	271.20	
	A-07-02 24BDA	2160.00	197704	19810310	15.80	19880606	26.60	19871216	25.80	
								19880606	26.60	
	A-07-03 30CCC	2140.00	197704	19820114	62.40	19850625	123.30	19871216	113.40	
								19880606	119.20	
	B-05-01 14CAB	1503.00	19821001	19870605	437.10	19821001	564.70	19871216	440.20	
								19880602	439.70	
PRZ	A-18-23 06CDC2	5250.00	19670111	19700306	27.37	19681017	36.68	19880411	30.40	
	A-18-30 20CDD	6381.00	19690710	19850418	358.80	19760129	366.80	19880412	360.00	
	A-19-29 17ACB2	6181.00	19600323	19730227	210.20	19850418	219.80	19880411	214.40	
	A-21-28 23AAC	5825.00	19680527	19850418	29.00	19750131	60.40	19880411	32.10	
RAN	B-03-12 19AAA	1410.00	19780120	19860611	384.20	19871209	385.90	19871209	385.90	
								19880613	385.50	
	B-03-13 28ADC	1338.00	19841128	19841128	314.80	19870612	315.50	19871209	315.10	
								19880613	314.90	
	B-04-14 32BAA	1235.00	19780922	19780922	240.00	19880111	280.60	19880111	280.60	
	B-04-15 11ADD	1226.00	19830208	19830208	292.00	19880229	318.80	19880229	318.80	
	B-04-15 13ADA	1239.00	19781118	19781118	270.00	19870126	329.90	19880111	327.40	
	B-05-15 06BAA2	1156.00	19790110	19790110	227.70	19810212	251.45	19880112	230.10	
	B-05-15 35BDD2	1208.00	19771223	19771223	230.00	19880113	285.60	19880113	285.60	
	B-06-16 12AAA	1205.00	19670808	19670808	275.80	19820125	297.20	19880114	289.50	
	B-06-16 22ADA	1121.00	19480608	19610526	167.40	19840118	198.10	19880112	190.50	
	B-06-16 33AAA	1064.00	19570122	19570122	121.21	19770211	149.98	19880112	139.90	
	B-07-17 22ABC1	921.00	19450109	19451003	26.92	19880114	49.40	19880114	49.40	
	B-07-17 23CAB	942.00	19830207	19840118	67.60	19880112	71.30	19880112	71.30	
SAC	B-17-17 19WBAD	1835.00	19730118	19860129	382.80	19750123	387.19	19880113	384.30	
	B-20-18 22AAC	2495.00	19641014	19730118	732.90	19810217	767.70	19880112	744.70	
	B-21-17 24CBC	3330.00	19780417	19780417	118.00	19880115	129.20	19880115	129.20	
	B-21-17 34DDB	3050.00	19520215	19840117	57.40	19530213	62.59	19880112	58.70	
	B-21-18 21BCC	2665.00	19840116	19840116	897.00	19850115	900.50	19880112	898.60	
SAF	D-04-22 35ADA	2857.54	19391020	19850207	5.73	19580128	41.60	19880127	8.40	
	D-05-23 02DBC	2720.00	19680509	19820125	11.20	19770117	30.45	19880127	14.20	
	D-05-23 03CAB	2790.00	196411	19810120	61.53	19740218	90.10	19880127	67.10	
	D-05-23 25DCD	2778.00	19680509	19820124	49.00	19710119	55.64	19880126	49.70	
	D-05-24 08CCB2	2750.00	19680327	19791219	36.46	19780209	41.08	19880127	39.60	
	D-06-25 25CDD	2873.00	19580113	19680509	13.76	19580113	27.98	19880126	17.60	
	D-06-25 30DAC	2885.00	19391030	19740218	13.55	19720118	19.02	19880126	16.50	
	D-06-26 08CCD	3300.00	19651020	19651020	265.20	19801215	270.91	19880126	268.30	
	D-07-26 18CDA1	2961.15	19391228	19690226	53.43	19810123	67.87	19880126	55.90	
	D-07-26 22BAB	2951.17	19400109	19430112	23.19	19480428	58.23	19880122	25.60	
	D-07-27 02ADD	3067.00	19521201	19850208	20.10	19570930	134.94	19880122	21.20	
	D-08-26 33CCC1	3340.00	19500313	19500313	16.98	19760109	53.38	19880122	31.20	
SAF RES	D-04-21 33BAC	4478.00	19650118	19650118	11.80	19880620	12.00	19880620	12.00	
	D-04-21 34BAC	4230.00	19650119	19880620	30.30	19650119	55.15	19880620	30.30	
	D-04-22 35BDD1	2890.00	19641208	19880620	23.00	19641208	42.90	19880620	23.00	
SBV	D-23-31 29DCA2	4040.00	19850709	19850709	200.00	19860213	234.20	19880224	202.50	
	D-24-30 16CCC	3800.00	19710701	19830218	29.00	19880224	30.70	19880224	30.70	
SFP	A-20-06 02BBC	7187.00	19630622	19831214	1076.00	19870325	1113.50	19880411	1108.20	
	A-20-08 18BBB	6839.75	19621010	19840306	557.70	19650206	606.60	19880223	581.10	
	A-21-05 02ABC3	7135.00	19670315	19730508	11.15	19760119	36.30	19880111	23.40	
	A-21-06 35CBA	7140.00	19541208	19811102	1221.00	19841221	1253.00	19880411	1246.30	
	A-22-06 23DBC3	7332.00	19770419	19880223	114.10	19770419	114.15	19880223	114.10	
	A-22-06 25CAB1	7320.00	19770418	19880222	152.00	19770418	152.50	19880222	152.00	
	A-22-06 25CAC2	7300.00	19790626	19880222	4.90	19790626	5.70	19880222	4.90	
	A-22-06 27ADA1	7310.00	19671024	19790214	23.50	19780208	61.95	19880109	39.40	
								19880222	39.80	
	A-22-06 27DBC1	7319.00	19790621	19790621	50.95	19880222	59.70	19880222	59.70	
	A-22-07 32CBB	7175.00	19681008	19730409	48.65	19760119	137.40	19880111	132.70	
	A-24-05 11CAC	7389.00	19650706	19801223	260.39	19700324	284.35	19880324	273.90	
	A-25-06 20ACC	6965.00	19661003	19760119	86.05	19780824	97.30	19880324	88.10	
SFP RES	05 132-00.14X13.82	4745.00	19580212	19870410	128.20	19580212	135.00	19880407	132.10	
	05 132-00.52X14.00	4755.00	19590406	19590406	120.40	19860523	143.80	19880407	143.50	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
SNO	A-12-22E19ADD	5733.00	19720223	19860417	70.70	19721207	90.10	19880413	75.80	
	A-13-21 10CDA	5632.00	19741219	19760127	135.35	19880414	151.10	19880414	151.10	
	A-13-21 24CCB	5618.00	19520424	19580424	60.21	19700305	97.28	19880413	93.80	
	A-13-21 34DCC2	5658.00	19500914	19530114	74.33	19820216	136.80	19880413	132.30	
SRV	A-01-01 04AAA2	1028.00	19530202	19860109	81.70	19641216	193.32	19871214	105.10	S
								19880601	112.70	
	A-01-01 19DCD1	965.00	19520124	19850626	24.80	19640214	59.70	19871214	27.10	
	A-01-02 09AAB2	1058.00	19590108	19840112	78.30	19620201	145.79	19871218	84.60	
								19880608	93.30	P
	A-01-02 19BAA	1025.00	19570208	19840112	43.40	19620131	113.12	19871218	51.00	
								19880608	52.90	
	A-01-02 26AAA	1042.00	19480713	19790122	27.70	19590109	74.42	19871218	42.90	
	A-01-03 01DDD	1138.40	19720121	19790411	36.00	19761208	49.00	19871218	44.80	
								19880609	44.50	
	A-01-03 05BAA	1087.00	19830210	19850624	65.50	19830210	75.97	19871218	71.20	
								19880608	67.40	
	A-01-03 18BBC	1058.00	19720111	19851211	51.90	19880608	98.40	19871218	57.30	
								19880608	98.40	
	A-01-04 13ADC3	1182.00	19820908	19880129	78.00	19821129	89.60	19880129	78.00	
	A-01-04 18DAD	1130.00	19511119	19830527	18.93	19761216	61.80	19871218	36.20	
	A-01-04 22DBC	1166.00	19830113	19880129	67.60	19830113	85.60	19880129	67.60	
	A-01-04 25DDC	1190.00	19630601	19880128	120.80	19630601	223.00	19880128	120.80	
	A-01-04 27AAA2	1172.00	19611101	19800512	51.00	19880128	143.50	19880128	143.50	
	A-01-05 06BDD	1201.00	19570212	19831212	77.10	19660907	164.21	19871218	136.80	
								19880608	87.10	
	A-01-05 08AAA2	1202.00	19730808	19880107	148.70	19730808	190.00	19880107	148.70	
	A-01-05 14BCC	1246.00	19841128	19880203	208.50	19841128	244.10	19880203	208.50	
	A-01-05 21DCC	1230.00	19830111	19880203	174.90	19830111	233.30	19880203	174.90	
	A-01-05 22DDD	1234.00	19611101	19880203	190.40	19611101	210.00	19880203	190.40	
	A-01-05 26DDD	1225.00	19451210	19451210	66.00	197901	227.00	19871218	156.40	
								19880129	155.90	
								19880608	155.40	
	A-01-05 27DCC	1219.00	19550401	19550401	140.00	197301	234.00	19880129	161.00	
	A-01-05 29DDA	1218.00	19510911	19510911	110.00	19711222	199.00	19880129	139.30	
	A-01-05 30BDD	1199.00	19471018	19471018	56.00	197802	193.00	19871111	117.60	
								19871229	112.10	
								19880609	131.10	
	A-01-05 32DCC	1205.00	19680412	19880129	140.30	197802	208.00	19880129	140.30	
	A-01-05 35BAA	1216.00	19511224	19511224	140.00	19711222	250.80	19880128	164.70	
	A-01-06 03ADA	1400.00	195901	195901	422.14	19760109	519.80	19871218	427.70	
								19880608	425.90	
	A-01-06 08CCD2	1288.00	19490309	19490309	165.00	197802	388.00	19871218	271.60	
	A-01-06 14AAA2	1426.00	19640228	19880608	476.70	19790110	579.60	19871221	482.60	
								19880608	476.70	
	A-01-06 25ADA1	1389.00	19711222	19880222	441.80	19760109	524.50	19880222	441.80	
	A-01-07 11CAA	1712.00	19711223	19871223	358.60	19711223	363.00	19871223	358.60	
								19880606	359.50	
	A-01-07 18ACC	1481.00	19830420	19880608	532.90	19830420	601.10	19871221	540.00	
								19880608	532.90	
	A-01-07 36DAA5	1570.00	19790430	19790430	470.60	19880225	515.20	19880225	515.20	
	A-01-07 32ACA	1431.00	19861201	19871221	486.60	19861201	510.00	19871221	486.60	
								19880609	494.90	
	A-01-08 10DCC	1867.00	19821209	19850626	83.60	19821209	93.00	19871223	87.60	
								19880607	88.10	P
	A-01-08 25CBA	1745.00	19750110	19750110	280.00	19870609	284.30	19871223	280.80	
	A-02-01 14BBA	1085.00	19490211	19490211	74.20	19770609	241.00	19871218	121.20	
								19880608	120.80	
	A-02-01 31DAA	1018.00	19620213	19860106	88.00	19620213	167.63	19871215	96.00	
								19880601	100.00	
	A-02-02 18DDD	1122.00	19630218	19880608	164.00	197901	230.00	19871221	166.00	
								19880608	164.00	
	A-02-03 07CAA	1160.40	19250901	19250901	9.00	19821201	131.80	19871218	122.80	
								19880608	123.60	
	A-02-03 35BBC	1132.00	19721128	198001	59.00	197304	177.70	19871221	60.00	
	A-02-04 01BCC	1293.00	19831006	19880111	329.90	19831006	435.40	19880111	329.90	
	A-02-04 01DAA1	1298.00	19630208	19640219	213.66	19880111	260.50	19880111	260.50	
	A-02-04 02BBB	1300.00	19751230	19880128	382.00	19841128	439.10	19880128	382.00	
	A-02-04 11AAD2	1276.00	19661229	19790411	273.00	19821202	389.10	19880128	292.70	
	A-02-04 11BAD	1281.00	19480517	19480517	92.00	19880128	243.10	19880128	243.10	
	A-02-04 14ACB	1278.00	19600618	19600618	220.00	19880111	371.00	19880111	371.00	
	A-02-04 15DBD	1310.00	19821230	19821230	211.10	19841203	450.10	19880128	397.30	
	A-02-04 22BDD	1290.00	19520722	19520722	155.00	19871216	340.40	19871216	340.40	
								19880610	331.00	
	A-02-04 22DCC	1268.00	196602	19880107	318.70	197802	376.00	19880107	318.70	
	A-02-04 23BCC2	1270.00	19660923	19880111	337.40	197901	403.00	19871216	355.50	
								19880111	337.40	
								19880610	346.90	
	A-02-04 24BAD	1252.00	19630219	19880111	233.70	19720111	343.00	19880111	233.70	
	A-02-04 27BCB2	1270.00	19561101	19561101	117.15	19841205	300.20	19880107	273.00	
	A-02-04 29DAB	1241.00	19840710	19880609	10.90	19871218	12.40	19871218	12.40	
								19880609	10.90	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
SRV-- Cont.	A-02-05 19ABA	1259.00	19660720	19871221	237.00	19660720	311.66	19871221	237.00	
	A-02-05 22BAA	1285.00	19720111	19880108	241.30	19720111	287.40	19880108	241.30	
	A-02-06 32ACD	1298.00	19590210	19851210	282.00	19790109	402.70	19871218	282.60	
								19880608	293.10	
	A-02-07 33BCB	1620.00	19830420	19850620	30.00	19880608	35.50	19871221	34.80	
								19880608	35.50	
	A-03-01 11DDA	1191.54	19350410	19381025	76.30	197901	300.00	19871221	285.60	
								19880607	286.90	
	A-03-01 21CBB	1127.00	19680402	19680402	209.50	19850624	278.60	19871214	235.80	
								19880601	248.30	
	A-03-01 35ABB	1128.00	19630103	19841217	182.00	197901	227.00	19871218	183.60	
	A-03-02 22BAA	1249.00	19480907	19481229	186.17	19820111	448.80	19871221	341.50	
								19880607	338.60	
	A-03-02 24CCB	1257.00	19740116	19871223	326.60	19780215	364.70	19871223	326.60	
								19880607	333.20	P
	A-03-02 29DDA2	1195.00	19680111	19700128	224.70	19871223	346.30	19871223	346.30	
								19880607	262.00	
	A-03-03 13BDB3	1410.00	19700218	19700218	290.00	19861202	347.60	19880608	343.50	
	A-03-03 32DAA	1244.00	19821129	19880608	265.40	19821129	286.80	19880608	265.40	
	A-03-04 02BBB	1517.00	19790319	19790319	368.00	19860603	640.80	19871218	396.20	
								19880609	621.70	P
	A-03-04 17BAA	1414.00	19630116	19630116	283.90	19850104	448.40	19880119	442.00	
								19880614	511.50	P
	A-03-04 24CAA	1375.00	19570212	19570212	205.17	19861201	297.50	19871216	294.20	
								19880609	296.60	
	A-03-04 25BBB	1350.00	19860306	19880112	376.00	19860306	384.10	19880112	376.00	
	A-03-04 26CBB	1335.00	19660825	19660825	211.30	19830111	252.30	19880112	251.40	
	A-03-04 27DDD2	1323.00	19830111	19880111	263.70	19830111	264.90	19880111	263.70	
	A-03-04 34ADD	1309.00	19710128	19710128	283.20	19800306	423.80	19880111	318.20	
	A-03-04 34CAC	1308.00	19681217	19681217	295.00	19860312	401.30	19880111	393.10	
	A-03-05 17DCC2	1423.00	19610824	19610824	228.00	19880613	297.40	19880613	297.40	
	A-03-05 21BBA	1435.00	19660824	19660824	240.00	19790126	333.00	19871216	316.80	
								19880609	316.00	
	A-03-05 25CAB	1555.00	19660823	19660823	450.00	19860603	547.60	19871216	507.70	
								19880609	506.80	
	A-03-05 28ADA	1421.00	19721201	19721201	312.00	19830114	397.80	19880108	381.40	
	A-03-07 06CDA	1415.00	19850110	19871224	28.70	19860530	40.50	19871224	28.70	
								19880613	29.10	
	A-04-01 18DAA	1250.00	19620222	19620222	206.72	19761220	346.80	19871216	331.90	
								19880601	334.40	
	A-04-01 22AAA	1280.60	19481229	19481229	199.40	19841205	493.30	19871223	483.90	
								19880607	481.40	
	A-04-01 30AAB2	1230.00	19491103	19491103	174.26	19880607	399.30	19871216	394.20	
								19880607	399.30	
	A-04-02 19BCC	1276.00	19481104	19481229	221.47	19871222	468.00	19871222	468.00	
								19880607	463.10	
	A-04-02 20CDD	1290.00	19481104	19481104	246.70	19870609	446.80	19871222	444.90	
								19880607	440.80	
	A-04-02 36AAA	1376.00	19481220	19481220	273.11	19870304	573.80	19871222	567.30	
								19880607	561.80	
	A-04-03 05DCC2	1541.00	19840308	19860609	197.80	19840308	313.20	19871222	199.40	
	A-04-03 36AAA1	1503.00	19830721	19851213	350.70	19830721	400.10	19871222	356.30	
								19880608	365.20	
	A-05-01 33BCC	1391.00	19821022	19841211	194.40	19821022	208.50	19871216	203.80	
								19880601	205.40	
	A-05-04 25DBD	2250.00	19660916	19740121	292.10	19780125	297.40	19871218	296.40	
								19880609	296.50	
	A-05-04 33DAA	1972.00	19831103	19831103	758.30	19880609	784.20	19871224	779.90	
								19880609	784.20	
	B-01-01 12BAA2	980.00	19460306	19460306	30.89	19620214	130.48	19871214	52.50	
								19880601	66.70	
	B-01-01 17AAA1	976.00	19450101	19450101	48.00	19640121	109.30	19871215	69.50	
	B-01-02 05CBB	1063.00	19470214	19471106	168.95	19761220	272.10	19871215	228.50	
								19880601	233.70	
	B-01-02 16BBB	987.00	196202	19841214	136.10	19710208	230.20	19871215	145.80	
								19880601	155.50	
								19880908	251.10	P
	B-01-02 28CBD	890.00	19560109	19870601	19.70	19660121	64.38	19871215	21.90	
								19880601	21.10	
	B-01-02 36BBC	891.00	19510901	19830209	6.00	19650203	70.53	19871215	11.08	
								19880601	12.70	
	B-01-03 19CBB	995.00	19560110	19570116	130.11	19650203	148.30	19871215	133.00	
								19880601	181.00	P
	B-01-03 21DBB	987.00	19560110	19560110	137.30	19780510	167.00	19871215	148.30	
								19880601	148.80	
	B-01-03 34BBB	917.00	19280430	19440501	54.60	19660121	81.85	19871215	64.00	
								19880601	64.60	
	B-01-04 27ABB	988.00	19560110	19870220	118.95	19720114	159.50	19871215	125.70	
								19880601	132.90	
	B-01-04 28DAA	967.00	19821201	19860113	100.70	19880420	111.30	19880420	111.30	
	B-02-01 14CBB	1057.00	19601229	19651221	130.08	19800116	218.80	19871214	202.20	
								19880531	200.40	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
SRV--Cont.	B-02-01 18CBB2	1078.00	19761223	19880531	362.10	19821025	413.00	19871214	365.30	
								19880531	362.10	
	B-02-01 20BCC	1042.00	19630108	19630108	280.52	19871214	381.90	19871214	381.90	
								19880531	382.60	P
	B-02-01 33BBB2	1009.00	19560215	19560215	116.90	19680119	159.90	19871214	122.30	
								19880601	129.30	
	B-02-02 02BAD	1175.00	19600209	19600209	285.78	19821201	472.30	19871214	446.90	
								19880531	447.20	
	B-02-02 04DCB	1204.00	19460207	19460207	202.80	19871214	359.40	19871214	359.40	
	B-02-02 22ABB	1119.00	19620223	19620223	337.62	19821201	410.10	19871214	375.40	
								19880531	371.30	
	B-02-02 25CBB2	1055.00	19720112	19880610	295.30	19761217	365.40	19871215	300.70	
								19880601	295.30	
	B-03-01 05ABB	1238.00	19820112	19851205	393.90	19820112	418.70	19871221	402.20	
								19880606	406.80	
	B-03-01 08ABB1	1217.00	19511114	19520129	246.13	19761216	439.80	19871214	365.80	
								19880531	396.50	S
	B-03-01 16DAB	1167.00	19621219	19621219	344.10	19821216	415.60	19871214	412.00	
	B-03-01 24BBB3	1118.00	19770117	19850115	292.50	19870602	326.40	19871214	317.50	
	B-03-01 27BBB	1136.00	19821220	19860225	345.30	19821220	362.50	19871214	348.10	
								19880531	349.50	
	B-03-01 29BCC	1153.00	19821129	19861208	416.90	19841129	448.90	19871214	438.10	
								19880531	474.60	P
	B-03-01 34DBB1	1100.00	19570128	19570128	224.07	19841218	340.60	19871214	326.50	
								19880531	325.80	
	B-03-02 14BCB2	1260.00	19810727	19860604	455.30	19810727	489.50	19871214	475.20	
								19880531	472.30	
	B-03-02 21ABA	1332.00	19500321	19500321	298.72	19651120	466.40	19871214	389.50	
								19880531	399.40	
	B-04-01 09BCD	1341.00	19381101	19381101	180.00	19870605	382.90	19871216	377.00	
	B-04-01 19BDC	1320.00	19470401	19470401	230.00	19821203	489.60	19871216	468.90	
								19880606	498.10	P
	B-04-02 05DBB	1478.00	19821102	19821102	313.40	19880602	318.90	19871222	318.40	
								19880602	318.90	
	B-04-02 27DCD	1332.00	19381201	19381201	203.00	19841203	478.80	19871221	473.70	
								19880606	550.20	P
	B-04-02 36BCB	1306.00	19570129	19570129	354.45	19820112	490.80	19871229	457.20	
								19880606	465.20	
	B-04-03 04BDB	1595.00	19821008	19870604	359.00	19821008	369.57	19871221	360.00	
								19880602	359.70	
	B-04-03 14ABA	1500.00	19841219	19841219	300.60	19871228	306.30	19871228	306.30	
								19880618	310.20	P
	B-05-02 24BAB	1580.00	19830112	19830112	499.70	19871216	502.10	19871216	502.10	
								19880602	511.60	P
	B-05-02 30ADD	1571.00	19821102	19821102	385.90	19871221	396.10	19871221	396.10	
								19880602	390.50	
	B-05-02 35BAA	1491.00	19550215	19550215	330.41	19810129	388.40	19880607	384.40	
	B-05-03 15AAA	1710.00	19821104	19880602	481.40	19850627	488.10	19871221	481.60	
								19880602	481.40	
	B-05-03 22ADD	1649.00	19821104	19880606	422.80	19821104	424.90	19871222	423.10	
								19880606	422.80	
	B-06-02 18DBB	2105.00	19830111	19861208	516.20	19851211	519.70	19871221	517.00	
								19880602	517.00	
	B-06-03 33DCB	1850.00	19830111	19880602	569.90	19830111	603.90	19871221	601.20	
								19880602	569.90	
	C-01-02 08CDA	885.00	19560116	19841221	41.20	19650208	67.65	19871215	43.30	
								19880601	42.90	
	C-01-03 08CBD	838.00	19821007	19821206	3.80	19880601	17.39	19871212	16.34	
								19880601	17.39	
	C-01-04 03ABB	900.00	19780328	19830209	52.60	19790510	66.40	19871215	57.58	
								19880601	59.90	
	C-01-04 07BDD	867.00	19810218	19821130	37.50	19870611	43.30	19871215	40.70	
								19880601	40.20	
	C-01-04 26ABB	823.00	19821129	19850626	21.50	19821129	25.30	19871215	23.90	
								19880601	23.50	
	D-01-01 13DDD1	1010.00	19630423	19690129	38.00	19781222	65.15	19871005	58.60	
								19871109	58.24	
								19871207	57.84	
								19871223	56.80	
								19880301	56.77	
								19880606	57.70	
								19880809	58.80	S
	D-01-02 20DAA	1050.00	19560111	19840418	54.90	19870610	184.00	19871223	59.20	
								19880608	184.20	P
	D-01-03 02BDB	1203.00	19640310	19710212	123.70	19780424	148.20	19871218	137.50	
								19880610	141.40	
	D-01-04 27DAA2	1170.00	19841128	19871218	125.30	19841128	138.10	19871218	125.30	
	D-01-04 28CBC	1165.00	19810205	19871221	118.00	19820114	137.30	19871221	118.00	
	D-01-04 36DDD	1183.00	19560117	19560117	99.45	19780424	133.10	19871221	100.00	
								19880608	101.90	
	D-01-05 36DDD	1252.00	19490106	19490106	131.64	19711222	230.60	19871221	149.30	
								19880608	149.60	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
SRV--Cont.	D-01-06 04DAA	1276.00	19630219	19851216	169.90	19771228	344.20	19871221	214.50	
								19880608	210.70	
	D-01-06 11CDD2	1295.00	19560302	19570205	265.05	19771228	402.60	19871221	296.90	
								19880608	326.10	
	D-01-06 24CCC2	1312.00	19590101	19630121	156.21	19771229	378.90	19871221	263.90	
								19880608	415.10	P
	D-01-06 27DDD2	1298.00	19821202	19871221	96.00	19821202	110.00	19871221	96.00	
								19880608	136.20	P
	D-01-06 29DAA	1269.00	19821216	19841202	226.70	19880816	304.70	19880816	304.70	
	D-01-07 25ADD	1456.00	19770928	19800131	315.70	19870604	332.00	19871223	331.90	
	D-01-07 31BAC1	1337.00	19540331	19540331	172.29	19580729	219.55	19871221	194.90	
								19880608	197.30	
	D-01-08 21ADB PZ1	1565.00	19790217	19790217	308.70	19880609	432.90	19871223	431.10	
								19880609	432.90	
	D-01-08 21ADB PZ2	1565.00	19790217	19861205	315.20	19790217	396.80	19871223	320.20	
								19880609	318.60	
	D-01-09 07BDC2	1751.00	19861202	19880606	700.60	19870609	854.50	19871228	844.00	
								19880606	700.60	
	D-01-10 35DBA	2040.00	19841221	19841221	29.90	19861203	35.50	19871224	35.40	
								19880606	65.20	P
	D-02-03 22DDD	1113.00	19551001	19551001	50.00	19790110	89.40	19880606	66.30	
	D-02-05 07ADD	1196.00	19560117	19871221	111.70	19751205	146.40	19871221	111.70	
								19880608	116.00	
	D-02-05 09DDD	1216.00	19680124	19871221	114.10	19730112	153.20	19871221	114.10	
								19880608	130.30	
	D-02-05 20DDA	1203.00	19560117	19871214	90.70	19640220	158.65	19871214	90.70	
								19880610	119.70	
	D-02-05 33AAD2	1213.00	19680124	19871214	99.00	19790108	180.62	19871214	99.00	
								19880610	142.20	
	D-02-06 04BDD	1285.00	19550218	19570205	157.67	19720113	291.30	19871221	192.80	
								19880608	248.20	
	D-02-06 12DDA1	1349.00	19390915	19390915	119.60	19880608	371.90	19871221	282.70	
								19880608	371.90	
	D-02-06 26DDD	1372.00	19490107	19490107	151.10	19711230	350.10	19871214	192.50	
								19880610	192.70	
	D-02-06 31AAA	1269.00	19391016	19871214	39.70	19680205	82.40	19871214	39.70	
								19880610	40.60	
	D-02-07 04ADD	1390.00	19520117	19520117	181.51	19860612	415.70	19871221	315.70	
								19880607	471.00	P
	D-02-07 12DDD	1457.00	19490217	19491020	196.70	19850626	391.70	19871223	343.80	
	D-02-07 25DDD3	1464.00	19660127	19660127	350.40	19850627	606.80	19871223	451.90	
								19880607	585.70	P
								19880802	602.20	P
	D-02-07 27DDA	1427.00	19490117	19490117	170.79	19860604	539.70	19871223	428.00	
								19880607	533.50	
	D-02-08 02CBB PZ1	1573.00	19790217	19790217	418.20	19880607	441.10	19871223	440.90	
								19880607	441.10	
	D-02-08 02CBB PZ2	1573.30	19851217	19880607	426.20	19851217	447.40	19880607	426.20	
	D-02-08 20DDA	1507.00	19490118	19490118	207.54	19850628	575.60	19871228	451.90	
	D-02-08 27DDD	1552.00	19490119	19490119	231.74	19860604	524.50	19871228	485.00	
								19880607	510.50	
	D-02-08E07DDD	1480.00	19490118	19490118	192.04	19861203	371.40	19871223	371.00	
	D-02-09 36DBD	1750.00	19741201	19741201	510.00	19880606	583.80	19871228	583.30	
								19880606	583.80	
	D-02-10 16BCB	1884.00	19750101	19861202	319.00	19750101	340.00	19871224	323.70	
								19880606	326.00	
	D-02-10 21ADB	1903.00	19841219	19841219	541.30	19880606	546.60	19871224	545.10	
								19880606	546.60	
	D-02-12 07ABA	2440.00	19830711	19871224	9.50	19880606	15.80	19871224	9.50	
								19880606	15.80	
	D-03-08 04BBA	1510.00	19520218	19520218	215.73	19850627	578.40	19871228	479.90	
	D-03-08 19ADD	1541.00	19841205	19880607	519.90	19851219	538.10	19871229	531.30	
								19880607	519.90	
	D-03-08 20BDC	1522.00	19511121	19511121	216.04	19841205	503.80	19871228	496.80	
								19880607	494.50	
	D-03-08 35BAA	1518.00	19821129	19880606	432.20	19821129	467.00	19871228	438.00	
								19880606	432.20	
	D-03-09 09DCD PZ1	1628.00	19790220	19790220	475.40	19860605	498.20	19871228	493.20	
								19880609	498.00	
	D-03-09 09DCD PZ2	1628.00	19790220	19790220	480.10	19880609	508.10	19871228	498.80	
								19880609	508.10	
	D-03-09 20DAA	1595.00	19630213	19630213	364.00	19850625	490.20	19871228	480.10	
								19880606	480.70	
	D-03-09 32ABA	1566.00	19481201	19481201	230.00	19821201	514.30	19871228	416.70	
								19880606	426.60	
	D-04-09 05AAB2	1550.00	19821130	19871228	412.80	19851219	419.70	19871228	412.80	
								19880606	416.70	P
SRV RES	A-02-05 08AAA	1308.00	19720111	19871221	253.60	19790509	313.80	19871006	276.49	
								19871207	273.31	
								19871221	253.60	
								19880302	272.45	
								19880601	277.00	
								19880810	279.20	
	A-02-05 10DDD1	1328.00	19660909	19870601	301.80	19760112	352.00	19871221	302.00	
								19880610	306.60	
	A-02-05 15AAA	1328.00	19540218	19540218	200.35	19880108	300.20	19880108	300.20	
	A-02-05 15DAA	1312.00	19620101	19620101	277.00	19880108	279.70	19880108	279.70	
	A-02-05 16AAA	1307.00	19540218	19540218	178.29	19720111	312.00	19880108	270.50	
	A-02-05 30DBC	1238.00	196601	19830124	142.80	196601	276.70	19880107	192.40	
	D-02-04 08DBA	1148.00	19710101	19710101	67.00	19830120	113.20	19871221	95.70	
								19880608	160.80	P
	D-02-04 25DDD	1181.00	19720114	19871214	84.10	19870603	169.40	19871214	84.10	
								19880610	117.40	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
SSI	027S21W07AAB	4010.00	19531216	19551005	83.37	19870218	124.40	19880210	112.50	
	028S21W31BCC	4140.00	19540127	19540127	99.32	19740116	161.70	19880210	122.60	
	D-12-27 32AAB	3980.00	19520121	19870217	131.30	19880128	139.40	19880128	139.40	
	D-12-28 15BCB	3680.00	19540127	19540127	83.36	19880128	317.80	19880128	317.80	
	D-12-28 25DCC	3645.00	19630314	19630314	126.65	19830217	272.00	19880128	266.80	
	D-12-28 33ABC1	3735.00	19511018	19511018	89.47	19880128	383.10	19880128	383.10	
	D-13-28 22BCC	3840.00	1963	1963	316.60	19880128	483.90	19880128	483.90	
	D-13-29 18BDB	3718.00	19410501	19410501	52.00	19880128	317.40	19880128	317.40	
	D-13-29 24DCC2	3660.00	19571212	19591223	0.15	19741203	127.00	19880128	115.30	
	D-13-29 28BBB1	3750.00	19580301	19820114	137.30	19880128	146.10	19880128	146.10	
	D-13-30 09ACD1	3570.00	19401119	19651226	22.29	19860213	61.60	19880129	46.10	
	D-13-30 24CDD	3595.00	19540101	19551202	58.54	19740116	82.31	19880129	59.30	
	D-13-31 29DDA	3624.00	19540101	19790205	47.40	19550302	64.04	19880129	49.80	
	D-14-31 19BAC	3715.00	19461119	19481220	13.68	19830217	64.20	19880129	58.70	
	D-14-31 22ADC	3690.00	19621017	19621017	54.68	19800305	131.00	19880129	91.60	
	D-14-31 25ADC2	3720.00	19621017	19840222	37.30	19760323	156.80	19880129	42.20	
	D-14-31 34ACC	3775.00	19850130	19880129	137.20	19850130	151.90	19880129	137.20	
	D-15-31 11DCC	3900.00	19621016	19630223	149.20	19810213	215.40	19880129	192.00	
	D-16-32 21CCC	4190.00	19531215	19540128	150.84	19800305	207.00	19880210	183.70	
	D-18-32 26BBB	4125.00	19491128	19491128	74.85	19790216	133.70	19880210	106.40	
SSW RES	C-14-01 03ADC	1969.00	19550112	19771214	403.80	19820129	412.80	19880112	407.80	
	C-19-01 36BDA	1710.00	19781030	19790308	166.30	19880112	167.20	19880112	167.20	
	D-16-01 18BBD2	1900.00	19720612	19830210	334.30	19761013	344.30	19880112	336.30	
	D-17-03 24DDB2	2097.00	19791218	19820129	446.60	19860320	457.48	19871211	457.00	
	D-17-04 34ABD	2301.00	1937	19831214	115.60	19560627	147.30	19871211	117.60	
	D-17-05 35AAD	2595.00	19531103	19870210	246.40	19531103	395.30	19871211	246.40	
	D-19-01 07ABD	1758.00	19780602	19780602	212.05	19830131	215.50	19880112	215.10	
	D-19-03 01ABA	2100.00	19841212	19871211	378.40	19841212	378.90	19871211	378.40	
	D-20-05 24DDD2	2475.00	19720729	19790815	564.30	19720729	595.00	19871211	575.20	
STJ	A-11-28 22BDA2	6062.00	19801210	19801210	50.00	19880316	59.40	19880316	59.40	
	A-11-29 20BAA	6520.00	1978	1978	510.00	19851003	520.40	19880316	519.80	
	A-13-27 15BDC	5845.00	19750211	19790213	256.32	19860107	273.40	19880317	264.90	
	A-13-28 27BDC	5670.00	19440607	19500807	-0.95	19520702	8.93	19880316	4.40	
	A-13-28 29BCD	5800.00	19440607	19681003	6.57	19810121	16.78	19880408	6.80	
	A-13-29 35AAA	6176.00	195702	19810925	148.30	195702	212.00	19880315	185.70	
	A-14-27 35BDC	5635.00	19750225	19780511	81.80	19810925	113.60	19880314	89.60	
TON	A-05-11 18AAA	2145.00	19700805	19850118	4.00	19700805	12.00	19880127	4.90	
	A-06-11 05CAD	2720.00	19781102	19810325	31.50	19781102	57.50	19880127	37.10	
	A-09-10 05AAA	4200.00	19780905	19810324	74.30	19830315	95.00	19880127	88.00	
	A-09-10 20BAA	3155.00	19780912	19840119	59.40	19880127	62.80	19880127	62.80	
	A-09-10 32BDB	3030.00	19720421	19730301	23.50	19750131	44.00	19880127	31.30	
	A-10-10 02DDB1	4960.00	19820119	19830525	44.20	19820928	55.61	19871124	52.40	
								19880316	53.03	
								19880602	50.58	
	A-10-10 23DDB	4700.00	19841114	19850524	22.92	19870824	29.41	19871124	29.35	
								19880316	26.20	
								19880602	27.16	
	A-10-10 25BAB	4650.00	19840320	19870309	19.55	19870824	21.95	19871124	20.33	
								19880316	20.06	
								19880602	20.37	
	A-10-10 28BCB	4610.00	19841030	19870309	6.18	19850806	12.20	19871124	8.42	
								19880316	8.30	
								19880602	7.34	
	A-10-10 28BCC	4690.00	19841030	19850524	94.94	19861124	111.40	19871124	111.30	
								19880316	104.60	
								19880602	112.50	P
	A-10-10 28BCD	4635.00	19841030	19850320	19.22	19871124	33.51	19871124	33.51	
								19880316	26.54	
								19880602	31.10	P
	A-10-10 29ACA	4570.00	19841030	19850320	5.44	19870824	9.55	19871124	8.71	
								19880316	6.24	
								19880602	6.49	
TUB RES	03 077-07.55X06.55	5108.00	195509	19871201	56.80	19661013	85.65	19871201	56.80	
	03 077-13.05X06.81	5120.00	19690212	19750320	28.39	19800417	70.45	19871211	49.10	
	03 077-13.36X06.44	5175.00	19711108	19780207	29.90	19840404	53.27	19871211	51.50	
	03 077-13.77X08.52	4940.00	19551202	19551202	23.00	19850717	36.70	19871201	32.00	
USC	D-10-13 12DDA	3418.00	19590315	19861210	446.80	19790212	458.35	19871202	446.90	
								19880603	447.10	
	D-10-13 25BCC	3353.00	19570618	19871202	391.70	19780208	409.10	19871202	391.70	
	D-10-14 06DCA	3402.00	19541203	19871203	425.80	19721108	447.70	19871203	425.80	
	D-10-14 17BAA	3405.00	19580203	19871202	427.20	19721107	453.10	19871202	427.20	
	D-10-14 19AAA	3325.00	19591027	19871203	351.90	19640422	359.34	19871203	351.90	
	D-10-14 29DCA	3273.00	19540603	19861210	301.90	19770208	328.40	19871202	303.00	
								19880603	302.40	
	D-10-14 35DCC	3090.00	19721109	19871130	70.80	19721109	94.35	19871130	70.80	
	D-11-13 28AAC	2895.00	19811231	19871130	219.90	19811231	231.20	19871130	219.90	
	D-11-13 33DCC	2772.00	19570304	19570617	525.50	197701	546.40	19871130	543.20	
								19880603	543.30	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER LEVELS IN SELECTED WELLS IN GROUND-WATER AREAS IN ARIZONA

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
USC--Cont.	D-11-13 34DCB	2800.00	19811231	19871130	501.30	19811231	503.20	19871130	501.30	
	D-11-13 36BBB	2906.00	19490225	19871201	437.00	197904	462.35	19871201	437.00	
	D-11-14 02BDB	3150.00	19540512	19871130	132.20	19570619	169.76	19871130	132.20	
	D-11-14 04ABC	3211.00	19811201	19880108	267.30	19821201	272.90	19880108	267.30	
	D-11-14 04BBC1	3160.00	19590415	19871222	222.20	19790323	250.00	19871222	222.20	
	D-11-14 04CCA	3122.00	19540513	19560504	210.52	19550125	224.21	19871222	210.80	
	D-11 14 10AAD	3000.00	19820107	19840103	28.80	19820107	64.50	19871130	48.10	
	D-11-14 10CCB	3088.00	19820107	19871202	187.40	19820107	198.10	19871202	187.40	
	D-11-14 21CBD	2938.00	19820105	19871201	208.10	19820105	216.40	19871201	208.10	
	D-11-14 22BAA	2918.00	19680822	19840103	51.40	19690326	99.30	19871130	57.10	
	D-11-14 32CCD	2658.00	19820105	19850620	64.00	19820105	97.00	19871203	82.90	S
								19880603	85.00	
	D-12-12 11BCB	2320.00	19811230	19871201	306.60	19811230	310.00	19871201	306.60	
	D-12-12 12ABB	2482.00	19811229	19811229	387.10	19871202	389.40	19871202	389.40	
	D-12-12 13BCB	2340.00	19811230	19871202	284.10	19811230	298.60	19871202	284.10	
	D-12-12 14DDD	2305.00	19811230	19871202	252.40	19811230	256.20	19871202	252.40	
	D-12-12 15CDD	2130.00	19811229	19871202	121.90	19811229	138.34	19871202	121.90	
	D-12-12 17DAA	2086.00	19841127	19841127	103.40	19871208	105.10	19871208	105.10	
	D-12-12 22ADC	2139.00	19420426	19420514	92.40	19830104	130.70	19871130	119.10	
								19880607	124.20	
	D-12-12 22DCD	2122.00	19550120	19680124	83.70	19800801	114.20	19880105	98.90	
	D-12-12 26DBD	2154.00	19470201	19470201	77.00	19871130	100.20	19871130	100.20	
	D-12-12 33DAD	2238.00	19851213	19871203	239.50	19870603	325.20	19871203	239.50	
								19880607	313.70	P
	D-12-12 36BAB2	2172.00	19820127	19820127	104.10	19871201	104.60	19871201	104.60	
	D-12-12 36CDC2	2178.00	19820127	19820127	89.00	19871130	92.00	19871130	92.00	
	D-12-13 02DBD	2720.00	19650503	19650503	355.75	19871201	417.10	19871201	417.10	
	D-12-13 04BBA	2755.00	19811228	19811228	536.90	19871130	538.10	19871130	538.10	
	D-12-13 07DDD	2522.00	19611011	19611011	376.01	19871231	403.10	19871231	403.10	
	D-12-13 08CAD	2565.00	19811231	19811231	429.60	19871202	433.30	19871202	433.30	
	D-12-13 12DAA	2570.00	19790108	19861218	140.20	19790108	174.70	19871221	144.70	
	D-12-13 13BCB	2495.00	19820106	19820106	181.30	19871130	183.20	19871130	183.20	
	D-12-13 13DAC	2638.00	19680418	19700408	315.10	19690401	320.04	19871130	318.00	
	D-12-13 18BCC	2412.00	19800201	19820201	322.20	19841029	330.60	19871231	324.20	
	D-12-13 22BBB	2422.00	19360729	19360729	193.41	19880603	255.70	19871202	254.60	
								19880603	255.70	
	D-12-13 24AAB	2632.00	19820105	19871130	338.30	19820105	339.40	19871130	338.30	
	D-12-13 25BCD	2592.00	19811223	19841026	309.00	19871221	384.50	19871221	384.50	
	D-12-13 26CCA	2500.00	19640423	19640423	283.53	19871222	311.60	19871222	311.60	
	D-12-13 28AAD	2344.00	19650126	19650126	181.95	19871204	222.80	19871204	222.80	
	D-12-13 30DAC	2328.00	19470923	19470923	215.48	19821201	244.40	19871228	243.30	
	D-12-13 32BCD	2320.00	19811228	19850104	217.60	19821201	230.20	19871228	223.70	
	D-12-13 35AAA	2558.00	19740701	19740701	362.30	19871221	369.20	19871221	369.20	
	D-12-13 36BCC	2540.00	19811222	19821201	347.50	19871221	356.90	19871221	356.90	
	D-12-14 05BBB	2662.00	19530430	19871203	117.60	19630413	141.55	19871203	117.60	
	D-12-14 05CCD	2628.00	19410326	19840103	60.70	19580521	119.61	19871130	77.00	
	D-13-12 02BBA	2200.00	19811228	19850107	99.70	19871228	117.10	19871228	117.10	
	D-13-12 04DCD	2382.00	19491006	19840104	127.20	19620117	149.53	19871202	129.70	
	D-13-12 12AAB	2190.00	19480217	19480217	55.90	19871202	83.10	19871202	83.10	
	D-13-12 12CAA	2282.00	19570130	19670120	151.22	19821201	174.90	19871228	172.90	
	D-13-12 14DCB	2378.00	19811230	19811230	238.30	19871202	240.00	19871202	240.00	
	D-13-12 25CCC	2538.00	19811230	19871203	137.40	19811230	138.60	19871203	137.40	
	D-13-13 08BAA	2239.00	19540129	19670321	98.14	19871228	121.70	19871228	121.70	
	D-13-13 12ACB	2480.00	19811201	19840118	322.20	19861220	329.10	19871223	328.90	
	D-13-13 13BBA	2395.00	19480130	19480130	141.91	19880607	221.10	19871203	221.00	
								19880607	221.10	
	D-13-13 14ABA	2407.00	19811228	19851230	245.30	19821201	254.50	19871223	254.40	
	D-13-13 14DCA	2298.00	19760701	19840105	121.10	19871228	142.70	19871228	142.70	
	D-13-13 15DAC	2278.00	19640707	19640707	99.07	19871228	136.60	19871228	136.60	
	D-13-13 16AAA	2261.00	19550125	19550125	85.93	19880607	133.10	19871204	129.40	
								19880607	133.10	
	D-13-13 17AAA	2240.00	19530618	19530618	92.32	19871228	122.70	19871228	122.70	
	D-13-13 18CBB	2310.00	19811229	19811229	179.50	19871203	184.30	19871203	184.30	
	D-13-13 19CDC	2360.00	19670125	19670125	188.30	19821201	212.70	19871228	212.20	
	D-13-13 21BAA	2251.00	19600126	19680129	82.45	19871228	114.10	19871228	114.10	
	D-13-13 26BAD2	2319.00	19750212	19750212	142.15	19861209	171.90	19871204	165.00	
	D-13-13 27CDD2	2292.00	19680130	19690204	93.35	19871204	123.00	19871204	123.00	
	D-13-13 30BCC	2424.00	19580122	19580122	257.39	19871203	282.10	19871203	282.10	
	D-13-13 32CCC	2468.00	19480823	19480823	216.88	19811230	239.20	19871203	238.00	
	D-13-13 33DAC	2296.40	19460125	19460125	33.03	19811231	116.90	19871203	114.00	
								19880609	116.52	
	D-13-13 34CDC	2292.00	19570205	19570205	71.30	19821201	173.60	19871228	107.20	
	D-13-13 35ADB	2337.00	19650923	19650923	110.30	19871228	154.70	19871228	154.70	
	D-13-13 36BBA	2336.00	19641219	19650129	101.45	19871228	157.10	19871228	157.10	
	D-13-13 36DDC	2393.00	19500518	19500518	102.10	19871228	191.60	19871228	191.60	
	D-13-14 19BBB1	2321.30	19570501	19660404	32.88	19871203	102.00	19871203	102.00	
	D-13-14 20BDA	2397.00	197103	19840118	98.50	19871223	126.20	19871223	126.20	
	D-13-14 21CDC2	2370.00	19851209	19860501	75.00	19880930	112.40	19871001	96.00	
								19871102	97.70	
								19871130	101.60	
								19871231	101.00	
								19880201	102.20	
								19880229	102.50	
								19880401	103.90	
								19880502	105.60	
								19880601	107.50	
								19880701	109.40	
								19880801	110.20	
								19880901	111.70	
								19880930	112.40	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
USC-- Cont.	D-13-14 22DCD	2425.00	19811221	19831227	49.00	19821201	56.20	19871221	52.60	
	D-13-14 25CAD	2440.00	19390920	19410324	4.60	197703	19.01	19871202	11.90	
	D-13-14 26CCD1	2418.00	19851210	19860501	51.00	19880801	103.30	19871001	81.50	
								19871102	84.90	
								19871130	87.30	
								19871231	90.25	
								19880201	92.57	
								19880229	84.54	
								19880401	82.10	
								19880502	84.30	
								19880601	87.40	
								19880701	91.50	
								19880801	103.30	
								19880901	95.50	
								19880930	96.90	
	D-13-14 26DDC	2425.00	19851211	19860331	15.80	19880801	37.60	19871001	33.00	
								19871102	34.20	
								19871130	35.30	
								19871231	36.84	
								19880201	37.50	
								19880229	27.10	
								19880401	26.90	
								19880502	28.90	
								19880601	31.50	
								19880701	35.30	
								19880801	37.60	
								19880901	37.40	
								19880930	33.30	
	D-13-14 30BBD	2330.00	19550504	19550504	74.55	19871228	136.80	19871228	136.80	
	D-13-14 30CCC1	2356.00	19470218	19470218	56.81	19871228	155.30	19871228	155.30	
	D-13-14 31BDC2	2389.45	19650820	19670210	119.06	19871228	192.80	19871228	192.80	
	D-13-14 32BBA	2389.00	19640302	19640302	90.88	19871228	175.30	19871228	175.30	
	D-13-14 32DCA1	2422.00	19570415	19580321	98.78	19871223	203.70	19871223	203.70	
	D-13-14 34AAA1	2412.00	19851211	19860702	89.10	19880930	118.60	19871102	106.50	
								19871130	107.50	
								19871231	109.30	
								19880201	111.10	
								19880229	111.40	
								19880401	111.40	
								19880502	111.40	
								19880601	113.10	
								19880801	114.80	
								19880930	118.60	
	D-13-14 34ABB	2420.00	19650309	19660419	68.00	19831227	185.80	19871001	152.30	
								19871102	153.65	
								19871130	154.84	
								19871223	155.40	
								19871231	155.79	
								19880201	156.68	
								19880229	157.60	
								19880401	158.70	
								19880502	159.47	
								19880601	160.17	
								19880701	160.90	
								19880801	161.50	
								19880901	162.60	
								19880930	163.68	
	D-13-14 35ADD	2454.00	19630308	19550706	81.30	19871223	174.70	19871223	174.70	
	D-13-14 36CCD	2482.00	19550502	19550502	97.55	19871221	225.20	19871221	225.20	
	D-13-15 08ADC	2806.00	19811221	19811221	56.00	19871201	68.40	19871201	68.40	
	D-13-15 20ABC2	2597.00	19600701	19871202	50.20	19600701	61.77	19871202	50.20	
	D-13-15 21ABB	2666.00	19610315	19861215	115.90	19650415	138.08	19871216	121.10	
	D-13-15 22CDC	2557.00	19560418	19831227	22.60	19610315	32.46	19871221	27.30	
	D-13-15 27DDC	2506.00	19500423	19680409	59.01	19821201	83.30	19871202	78.80	
								19871216	79.80	
	D-13-15 29CCA	2495.00	19720126	19720126	22.30	19871203	87.30	19871203	87.30	
	D-13-15 30AAD	2540.00	19811221	19840103	41.50	19871202	56.50	19871202	56.50	
	D-13-15 30DDC	2476.00	19530128	19570130	11.07	19871223	24.40	19871223	24.40	
	D-13-15 31DDC	2526.00	19560419	19560419	113.20	19871221	225.60	19871221	225.60	
	D-13-15 32DDA	2525.00	19811221	19831227	18.80	19871202	61.60	19871202	61.60	
	D-13-15 33CBB	2500.00	19390922	19420117	8.76	19871221	36.90	19871221	36.90	
	D-13-15 34AAC	2590.00	19480409	19480409	65.12	19831227	84.10	19871216	84.00	
	D-13-15 35DDC	2590.00	19640415	19660328	46.73	19871216	95.00	19871216	95.00	
	D-13-16 29ADD2	2807.00	19811222	19871201	54.30	19811222	56.70	19871201	54.30	
	D-13-16 29CCD	2734.00	19500317	19871130	131.25	197802	188.01	19871130	131.25	
								19880609	146.40	
	D-13-16 33BDD	2765.00	19470423	19520424	14.64	19540402	16.40	19871130	16.10	
	D-13-16 34CBB	2799.00	19560417	19871130	49.40	19820105	51.50	19871130	49.40	
	D-13-16 35DAC	2816.00	19820105	19820105	16.00	19871130	19.30	19871130	19.30	
	D-14-13 01DAB2	2395.00	19850109	19850109	178.60	19871228	181.70	19871228	181.70	
	D-14 13 03CAC	2333.00	19560206	19560206	83.41	19811228	135.00	19871228	125.60	
	D-14-13 08CDA	2583.00	19811221	19871208	68.00	19811221	82.20	19871208	68.00	
	D-14-13 11BAB	2335.00	19600108	19600108	77.30	19811228	120.10	19871228	114.20	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
USC-- Cont.	D-14-13 12DCA	2379.00	19650809	19660115	[illegible]	19871228	138.00	19871228	138.00	
	D-14-13 13CBC	2367.00	19500209	19500209	[illegible]	19831222	90.40	[illegible]	78.30	
	D-14-13 24DAA	2438.00	19490210	19490210	[illegible]	19831222	149.40	[illegible]	129.10	
								[illegible]	131.40	
	D-14-13 26BBC3	2390.00	19520121	[illegible]	[illegible]	19621201	103.20	[illegible]	85.30	
	D-14-13 27ADD2	2396.00	19461104	19570227	[illegible]	[illegible]	107.00	[illegible]	53.50	
	D-14-13 35CDB	2425.00	19310915	[illegible]	[illegible]	19821201	141.30	[illegible]	115.00	
	D-14-13 36BAD	2466.00	19490210	[illegible]	[illegible]	19821201	170.10	19871221	152.40	
	D-14-13 36DCD	2483.00	19430526	[illegible]	[illegible]	[illegible]	147.60	[illegible]	140.80	
	D-14-14 02BDB	2480.00	[illegible]	[illegible]	[illegible]	19871223	238.40	19871223	238.40	
	D-14-14 02DCA1	2497.00	[illegible]	[illegible]	[illegible]	19871222	262.90	19871222	262.90	
	D-14-14 04DAC2	2469.00	19811201	[illegible]	[illegible]	[illegible]	244.10	[illegible]	244.10	
	D-14-14 05ADB1	2439.00	[illegible]	[illegible]	[illegible]	[illegible]	218.60	[illegible]	218.60	
	D-14-14 07AAA	2461.00	19401114	[illegible]	[illegible]	19871221	241.80	[illegible]	241.80	
	D-14-14 07DDA2	2438.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	252.90	
	D-14-14 10ACD	2512.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-14 12AAC1	2539.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-14 12BDC1	2544.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	247.25	
	D-14-14 14CAA	2565.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-14 16CCC PZ1	2480.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	256.10	
								[illegible]	256.70	
	D-14-14 16CCC PZ2	2480.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
								[illegible]	212.50	
	D-14-14 16CCC PZ3	2480.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	214.50	
								[illegible]	225.10	
	D-14-14 16CCC PZ4	2480.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	217.80	
								[illegible]	[illegible]	
	D-14-14 20DAC2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871217	[illegible]	
	D-14-14 21BCC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	227.40	[illegible]	227.40	
	D-14-14 22CBA1	2542.00	[illegible]	[illegible]	[illegible]	[illegible]	262.10	[illegible]	262.10	
	D-14-14 22DBC	2555.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-14 24CDD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	313.40	
	D-14-14 28DAB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	252.80	
	D-14-14 30APD	2473.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	112.60	
	D-14-14 32CDB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	125.20	
	D-14-14 36AAD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-15 01BDB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-15 02DDA1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	24.60	
	D-14-15 03DDC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	123.70	[illegible]	123.80	
	D-14-15 04DAD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	114.50	[illegible]	114.50	
	D-14-15 05DAA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-15 05DBA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	277.00	[illegible]	277.00	
	D-14-15 06BBB2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	217.00	
	D-14-15 07BDB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	316.60	
	D-14-15 08CBD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	256.60	[illegible]	[illegible]	
	D-14-15 09ADA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	177.10	
	D-14-15 09BDD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	168.20	[illegible]	169.20	
	D-14-15 09DCC1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	373.60	[illegible]	373.60	
	D-14-15 10AAC2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	145.10	
	D-14-15 10DCC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	253.20	[illegible]	[illegible]	
	D-14-15 12CBD	2710.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871207	212.60	
	D-14-15 14DAB1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	309.10	
	D-14-15 15BAC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	262.70	
	D-14-15 16ACA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	245.80	19871216	245.60	
	D-14-15 16CDB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	271.70	
	D-14-15 17CAA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	351.60	
	D-14-15 21DAD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871214	[illegible]	
	D-14-15 23CBC	2785.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871214	[illegible]	
	D-14-15 26CBC	2750.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-15 28CBA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-15 28DDD	2716.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-15 29CBB	2701.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-14-16 04CCA2	2656.00	19811222	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19.90	
	D-14-16 06DBC	2640.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	55.60	
	D-14-16 07CCC	2805.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	232.10	
	D-14-16 08AAB	2676.00	19641124	[illegible]	[illegible]	19741124	[illegible]	[illegible]	24.70	
	D-14-16 31BBC2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	251.90	[illegible]	251.30	
	D-15-13 01ACC	2494.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	82.80	
	D-15-13 01BCB	2471.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	132.90	
	D-15-13 02AAA1	2460.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	147.45	
								19871221	149.00	
								[illegible]	146.30	
								[illegible]	151.72	
								[illegible]	155.10	
	D-15-13 02BBA1	2422.00	[illegible]	[illegible]	[illegible]	[illegible]	187.10	[illegible]	116.70	
								[illegible]	97.10	
								[illegible]	95.90	
								[illegible]	97.65	
								[illegible]	97.11	
	D-15-13 05ABD	2538.00	19811222	[illegible]	[illegible]	19811222	71.22	[illegible]	66.40	
	D-15-13 10DAC	2462.00	[illegible]	[illegible]	42.74	[illegible]	[illegible]	[illegible]	126.00	
								19871221	153.00	
								[illegible]	162.27	
								[illegible]	154.91	

See p. [illegible] for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
USC--Cont.	D-15-13 11AAD2	2482.13	19850711	19861223	99.00	19880810	101.75	19871116	101.15	
								19871221	99.70	
								19880301	101.62	
								19880523	101.60	
								19880610	101.75	
	D-15-13 11CBA	2457.41	19310715	19320215	30.50	19811228	155.70	19871230	127.90	
	D-15-13 12ACC1	2502.70	19851009	19861223	168.80	19880523	177.96	19871118	176.11	
								19871221	174.60	
								19880523	177.96	
	D-15-13 12CBB	2491.00	19850711	19871117	70.96	19860827	81.52	19871117	70.96	
								19871221	72.10	
								19880301	70.97	
								19880525	72.15	
								19880809	83.97	P
	D-15-13 13DBD1	2523.00	19851016	19860527	183.70	19880524	199.43	19871118	194.88	
								19871221	195.90	
								19880524	199.43	
	D-15-13 13DCB	2536.00	19811223	19861223	91.[illegible]	19811223	95.60	19871221	94.70	
	D-15-13 14CDD1	2497.00	19811222	19871203	164.70	19811222	186.30	19871203	164.70	
	D-15-13 14CDD2	2493.00	19811222	19811222	50.20	19871203	55.80	19871203	55.80	
	D-15-13 15DBB	2475.00	19530116	19560215	56.70	19811222	168.50	19871130	134.20	
	D-15-13 21CAD	2521.00	19811228	19871201	94.60	19811228	95.68	19871201	94.60	
	D-15-14 03DAD	2653.23	19630429	19630429	273.23	19871202	368.60	19871202	368.60	
	D-15-14 04CAB2	2585.00	19811222	19871202	149.20	19811222	150.80	19871202	149.20	
	D-15-14 06CAA	2524.00	19811222	19841212	95.40	19870603	10[illegible].60	19871202	98.20	
								19880609	122.90	P
	D-15-14 07CAB2	2536.00	19811221	19871201	90.[illegible]	19851014	108.30	19871119	100.40	
								19871201	90.00	
								19880523	174.20	P
	D-15-14 07CBC	2531.00	19540308	19560329	66.24	[illegible]	101.90	19871221	99.10	
	D-15-14 07CCD1	2535.00	19851015	19861226	183.[illegible]	19880524	206.58	19871116	203.80	
								19871221	202.70	
								19880524	206.58	
	D-15-14 08DAB	2588.00	19811221	19811221	130.[illegible]	1987120[illegible]	132.70	19871203	132.70	
	D-15-14 10DCD1	2654.00	19811221	19811221	15[illegible].40	19871202	171.80	19871202	171.80	
	D-15-14 13BBA	2725.00	19690805	1969080[illegible]	[illegible]	[illegible]	217.80	19871214	216.90	
	D-15-14 18ABB	2542.00	19811222	19811222	93.4[illegible]	[illegible]	104.40	19871201	104.40	
	D-15-14 18CBC2	2552.64	19850716	19861226	89.10	19880810	94.50	19871118	91.53	
								19871221	90.80	
								19880302	92.29	
								19880524	94.20	
								19880810	94.50	
	D-15-14 19BBB	2552.00	19851016	19861125	1[illegible].67	19880526	112.26	19871119	109.45	
								19871221	110.60	
								19880526	112.26	
	D-15-14 19CCC	2564.00	19541006	1955[illegible]	54.26	[illegible]	102.00	19871228	99.80	
	D-15-14 25BAA	2753.00	19811221	19811221	22[illegible]	19871130	224.10	19871130	224.10	
	D-15-14 27CBC	2693.00	19811218	19871204	172.10	19811218	174.70	19871204	172.10	
	D-15-14 31BBB	2587.00	19610206	1961[illegible]	71.6[illegible]	19641112	117.50	19871228	116.60	
	D-15-14 31BCB	2595.00	19621030	19640127	88.42	19641102	135.10	19871228	133.50	
	D-15-14 34BBC	2690.00	196911	19550318	143.[illegible]	1984[illegible]	185.90	19871204	177.60	
								19880608	180.20	
	D-15-15 04BBA	2803.00	197306	197306	323.[illegible]	1986[illegible]	431.40	19871215	342.70	
	D-15-15 06BBB	2715.00	19511023	19511023	243.[illegible]	19871130	335.30	19871130	335.30	
								19880608	334.40	
	D-15-15 08DCA	2753.00	19511024	19520325	237.9[illegible]	19871210	284.00	19871210	284.00	
	D-15-15 15CAA	2898.00	19520325	19520325	324.[illegible]	19871210	351.80	19871210	351.80	
	D-15-15 16CBB PZ1	2842.00	19670105	1968[illegible]	282.[illegible]	19871210	299.49	19871210	299.49	
								19880608	299.39	
	D-15-15 16CBB PZ2	2842.00	19670105	[illegible]	288.7[illegible]	[illegible]	308.00	19871210	305.65	
								19880608	305.75	
	D-15-15 16CBB PZ3	2842.00	19670105	19670724	341.[illegible]	19871210	376.64	19871210	376.64	
								19880608	372.74	
	D-15-15 29DAC	2860.00	19811221	19811221	307.[illegible]	19871130	320.70	19871130	320.70	
	D-15-15 30BBA	2787.00	19811221	19811221	246.5[illegible]	19871130	249.10	19871130	249.10	
	D-15-15 36CDC	3050.00	19640326	19650405	423.47	197801	450.90	19871201	432.20	
	D-15-16 05CBA	2970.00	19811229	19871202	194.60	19811229	204.40	19871202	194.60	
	D-15-16 06CDA	2835.00	19811228	19871202	87.40	19811228	96.00	19871202	87.40	
	D-15-16 07AAD	2857.00	19410403	19871202	69.00	19571230	112.94	19871202	69.00	
	D-15-16 11ADA	3180.00	19630416	19630416	11.90	19820617	31.50	19871202	23.00	
	D-15-16 15DDD	2990.00	19641201	19871202	48.80	19650119	63.54	19871202	48.80	
	D-15-16 29ADD	3008.00	19811228	19871204	277.80	19811228	291.10	19871204	277.80	
	D-15-16 36BAD	3320.00	19811223	19871207	39.70	19811223	70.40	19871207	39.70	
	D-15-17 10CAD	3260.00	19660830	19660830	22.31	19871210	26.80	19871210	26.80	
	D-15-17 16ACC	3191.00	19630417	19871210	55.20	19630417	77.57	19871210	55.20	
	D-15-17 17BBA	3122.00	19811230	19871210	12.50	19811230	16.30	19871210	12.50	
	D-15-17 21BDD	3310.00	19811229	19871210	197.90	19811229	208.60	19871210	197.90	
	D-16-13 34AAB2	2815.00	19600112	19600112	221.04	19831216	363.70	19871209	355.00	
								19880607	353.00	
	D-16-13 36DDD	2670.00	19691123	19691123	158.45	19871202	190.10	19871202	190.10	
	D-16-14 07CCD	2608.00	19511109	19511109	48.43	19811216	120.90	19871209	112.10	
	D-16-14 17BCC	2642.00	19550217	19550217	74.19	19841107	157.20	19871228	146.10	
	D-16-14 17DAD	2684.00	19541028	19541028	107.31	19791121	215.15	19871228	186.40	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
USC-- Cont.	D-16-14 19BBA1	2625.00	19520115	19520115	55.46	19811216	139.20	19871209	122.76	
	D-16-14 20CCC	2645.00	19510308	19510308	66.88	19811215	169.20	19871209	151.80	
	D-16-14 21CCB	2700.00	19671026	19680208	157.52	197702	220.50	19871228	206.60	
	D-16-14 25AAA	2841.00	197306	19751218	233.59	19871228	260.50	19871228	260.50	
	D-16-14 25BBB	2802.00	19640324	19680306	189.94	19841212	300.10	19871228	234.30	
	D-16-14 31AAD	2665.00	19641103	19641103	86.93	19871209	114.50	19871209	114.50	
	D-16-14 33BDD	2990.00	19740625	19861222	169.20	19840106	173.20	19871228	170.90	
	D-16-14N04CDD	2673.00	19631222	19631222	127.95	19871207	182.40	19871207	182.40	
								19871228	180.10	
	D-16-14N06CCD	2578.00	19641105	19641105	80.47	19841105	141.50	19871228	128.80	
	D-16-14S05DDB	2658.00	19811221	19871208	169.80	19811221	173.70	19871208	169.80	
	D-16-14S06CBA	2590.00	19620502	19630129	85.50	19841106	152.30	19871228	137.00	
	D-16-15 01DBC	3072.00	19811220	19871201	447.30	19811220	451.00	19871201	447.30	
	D-16-15 04DAC	2352.00	19530331	19530331	352.60	197702	389.90	19871130	374.30	
	D-16-15 05CBC PZ1	2867.00	19670104	19670104	236.56	19880608	311.95	19871130	310.45	
								19880608	311.95	
	D-16-15 05CBC PZ2	2867.00	19661214	19661214	256.87	19880608	289.47	19871130	285.17	
								19880608	289.47	
	D-16-15 05CBC PZ3	2867.00	19661214	19661214	252.60	19850619	270.65	19871130	267.35	
								19880608	269.35	
	D-16-15 09BBB	2905.00	[illegible]	[illegible]	312.73	19871214	317.10	19871214	317.10	
	D-16-15 14ACB	3055.00	19660531	[illegible]	424.20	197902	456.51	19871130	434.30	
	D-16-15 34AAA	3074.00	[illegible]	[illegible]	441.48	19840731	462.10	19871214	461.90	
	D-16-16 08AAB	3178.00	19820309	19871208	[illegible]	19820309	499.50	19871208	488.80	
	D-16-16 09DCD2	3235.00	19851205	19851205	537.70	19880608	547.70	19871208	546.45	
								19880608	547.70	
	D-16-16 10ACA	3235.00	19820309	[illegible]	[illegible]	19820309	516.50	19871208	496.90	
	D-16-16 10DCB2	3135.00	19820309	[illegible]	[illegible]	19820309	414.70	19871208	397.60	
	D-16-16 11ACC	3345.00	19811223	[illegible]	[illegible]	19811223	425.55	19871209	379.30	
	D-16-16 15CBB	3265.00	19820309	[illegible]	[illegible]	19820309	352.90	19871208	329.60	
	D-16-16 21BDC	3262.50	19461226	[illegible]	[illegible]	19820329	655.05	19871208	572.00	
	D-16-16 36ABC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	293.60	[illegible]	139.20	
	D-16-16 36CAB	[illegible]	[illegible]	[illegible]	[illegible]	19811222	86.19	[illegible]	73.40	
	D-16-17 08CBD	[illegible]	19811223	[illegible]	[illegible]	19811223	13.60	[illegible]	4.90	
	D-16-17 16ADD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	56.61	[illegible]	[illegible]	
	D-16-17 33ABB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	15.44	[illegible]	15.44	
	D-16-18 36CDA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	145.20	[illegible]	143.00	
	D-17-12 11CAB1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	65.54	[illegible]	55.70	
	D-17-12 25CBD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42.70	
	D-17-12 26BCC	3714.00	[illegible]	[illegible]	[illegible]	[illegible]	139.10	[illegible]	139.10	
	D-17-13 01ABB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	213.10	[illegible]	213.30	
	D-17-13 01CAB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	240.70	[illegible]	240.70	
	D-17-13 13ABB	2714.00	[illegible]	[illegible]	[illegible]	[illegible]	215.37	19871202	197.30	
	D-17-13 13ADB	2712.00	[illegible]	[illegible]	[illegible]	19811222	145.27	19871203	135.00	
	D-17-13 22AAA	[illegible]	[illegible]	[illegible]	[illegible]	19731109	345.00	[illegible]	[illegible]	
	D-17-13 24ACC1	[illegible]	[illegible]	[illegible]	56.54	19811222	[illegible]	[illegible]	149.10	
	D-17-13 25ABB	[illegible]	[illegible]	[illegible]	47.78	[illegible]	[illegible]	19871202	[illegible]	
	D-17-13 26CAB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
	D-17-13 36BCC	[illegible]	[illegible]	[illegible]	58.55	[illegible]	[illegible]	[illegible]	168.20	
	D-17-14 01BAA	[illegible]	[illegible]	[illegible]	214.00	[illegible]	233.20	19871201	233.20	
								19871228	238.40	
	D-17-14 04ACA	[illegible]	[illegible]	[illegible]	[illegible]	197704	189.10	19871228	180.40	
	D-17-14 04BCB	2718.00	[illegible]	[illegible]	122.50	[illegible]	192.40	19871228	164.00	
	D-17-14 07ADB	2635.00	[illegible]	[illegible]	114.10	19811221	132.53	19871130	125.50	
	D-17-14 07DCC	2712.00	[illegible]	[illegible]	[illegible]	19811221	153.97	[illegible]	142.72	
	D-17-14 07DDD	2704.00	[illegible]	[illegible]	[illegible]	19811221	155.14	[illegible]	[illegible]	
	D-17-14 08BDD2	[illegible]	[illegible]	[illegible]	[illegible]	19811221	176.60	19871130	162.10	
	D-17-14 18ADC	2718	[illegible]	[illegible]	[illegible]	19811222	153.86	19871130	137.80	
	D-17-14 19ABC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871201	[illegible]	
	D-17-14 21ACD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
								[illegible]	[illegible]	
	D-17-14 29ACA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871130	185.35	
	D-17-14 30BCC	[illegible]	[illegible]	[illegible]	[illegible]	19811222	[illegible]	19871130	167.30	
	D-17-15 02DCD	[illegible]	[illegible]	[illegible]	[illegible]	197902	[illegible]	19871202	554.20	
								[illegible]	555.60	
	D-17-15 13BDD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871202	655.00	
	D-17-16 10AAA	3560.00	19811221	19811221	[illegible]	19871202	24.08	19871202	24.08	
	D-17-16 14BBD	[illegible]	19721107	19811221	[illegible]	19721107	[illegible]	19871202	42.90	
	D-17-16 28DCA	4140.00	19820401	19871216	93.50	19820401	97.90	19871216	93.50	
	D-17-16 35BBA	4162.00	19820401	19871216	51.50	19820401	61.40	19871216	51.50	
	D-17-17 10ADD	3705.00	19811223	19811223	338.50	19871203	363.30	19871203	360.30	
	D-17-17 23BDC	3962.00	19811223	19871204	69.60	19811223	86.70	19871204	69.60	
	D-17-17 25BBA	3565.00	19811223	19811223	64.90	19871204	80.30	19871204	80.30	
	D-17-17 34ADB	4286.00	19811223	19871204	28.30	19811223	30.40	19871204	28.30	
	D-17-18 03ACC	3860.00	19820108	19871216	84.70	19820108	86.00	19871216	84.70	
	D-17-18 09BCC	3843.00	19721107	19871216	108.70	19811024	274.30	19871216	108.70	
	D-17-18 13ABD	4140.00	19611228	19871216	243.90	19811228	245.30	19871216	243.90	
	D-17-18 13DDD	4240.00	19811228	19811228	335.60	19871216	336.40	19871216	336.40	
	D-17-18 17BDB	3716.00	19811222	19811222	50.76	19871216	54.95	19871216	54.95	
	D-17-19 07CAA2	4140.00	19811228	19871216	252.70	19811228	253.60	19871216	252.70	
	D-17-19 29BBA	4463.00	19811228	19871216	137.70	19811228	155.90	19871216	137.70	
	D-17-19 29BDD	4515.00	19811228	19811228	191.50	19871216	197.50	19871216	197.50	
	D-17-19 29CDA	4582.00	19811228	19871216	50.90	19811228	54.40	19871216	50.90	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
USC--Cont.	D-18-13 01CDA	2793.00	19461010	19470122	48.[illegible]	19840229	181.60	19871203	160.50	
								19880606	165.60	
	D-18-13 10DCD	2955.00	19670912	19670912	261.40	19811214	329.60	19871203	305.40	
	D-18-13 12CDB UNSURV	2820.00	194610	194610	52.95	19811221	172.70	19871201	149.25	
	D-18-13 13AAC UNSURV	2839.00	195304	19550104	82.70	19811221	170.70	19871201	149.00	
	D-18-13 13BAC	2825.00	19391009	19391009	41.76	19831206	160.70	19871201	139.50	
								19880606	143.70	S
	D-18-13 16BBB	3174.30	19770104	19811214	421.90	19871203	422.90	19871203	422.90	
	D-18-13 18CAC	3345.00	19770105	19770105	185.40	19871203	196.80	19871203	196.80	
	D-18-13 21BCC1	3122.00	19770105	19770105	290.55	19871203	345.55	19871203	345.55	
	D-18-13 22ACA	2940.00	19641110	19641110	181.76	197902	214.25	19871203	208.70	
	D-18-13 23BAD UNSURV	2849.00	19520117	19520117	63.70	19811221	159.20	19871201	132.90	
	D-18-13 24BCB1	2860.00	19520118	19520118	77.61	19831206	165.60	19871201	145.60	
	D-18-13 26BBD UNSURV	2878.00	193610	193610	86.10	19770127	137.20	19871201	109.50	
	D-18-13 26CCD UNSURV	2884.00	19520117	19520117	48.62	19811221	122.52	19871201	91.50	
	D-18-13 27ADA2UNSURV	2897.00	19770107	19871201	114.80	[illegible]	137.80	19871201	114.80	
	D-18-13 35CBB2UNSURV	2895.00	195301	195301	[illegible]	19811221	117.30	19871201	85.40	
	D-18-14 06DBA	2860.00	19761210	19871208	211.20	19820114	226.20	19871208	211.20	
	D-18-14 08ADD	2985.00	19620214	19620214	267.45	197902	287.45	19871208	284.30	
								19880606	284.40	
	D-18-15 22ABC	4155.00	19811227	19871208	[illegible]	19811227	93.50	19871208	70.30	
	D-18-15 33ADA	4430.00	19811027	19811027	[illegible]	19871208	357.00	19871208	357.00	
	D-18-16 21DDC	4550.00	19820331	19871214	34.50	19820331	37.45	19871214	34.50	
	D-18-16 22DBC	4538.00	19820331	19871214	73.70	19820331	73.85	19871214	73.70	
	D-18-16 24BDC1	4390.00	19830331	19820331	[illegible]	19871214	5.80	19871214	5.80	
	D-18-16 32CCB	4921.00	19820331	19871214	[illegible]	[illegible]	78.56	19871214	55.04	
	D-18-16 34BDA	4760.00	19820331	[illegible]	[illegible]	[illegible]	131.00	19871215	129.40	
	D-18-17 02AAC	4232.30	19811223	[illegible]	[illegible]	19811223	73.64	19871204	53.00	
	D-18-17 32DBA	4520.00	19721117	19720117	[illegible]	[illegible]	[illegible]	19871209	109.70	
	D-18-17 33ADA	4438.00	19820324	[illegible]	[illegible]	[illegible]	93.[illegible]	19871208	93.00	
	D-18-17 36CBC	4442.00	19721114	[illegible]	[illegible]	19721114	[illegible]	19871208	128.30	
	D-18-18 19ABP	4237.00	19820326	[illegible]	[illegible]	[illegible]	[illegible]	19871209	113.40	
	D-18-18 20DAD2	4580.00	19820324	[illegible]	[illegible]	[illegible]	[illegible]	19871210	208.90	
	D-18-18 29ACC	4532.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871209	147.10	
	D-18-18 31CAC	4460.00	19721114	[illegible]	[illegible]	[illegible]	[illegible]	19871209	68.80	
	D-19-11 11CAC	3425.00	[illegible]	[illegible]	[illegible]	[illegible]	219.40	19871211	209.40	
	D-19-11 16CBA	3694.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871211	25.10	
	D-19-11 23CCB	3555.00	[illegible]	[illegible]	[illegible]	[illegible]	182.85	19871211	182.20	
	D-19-11 25AAA1	3485.00	[illegible]	[illegible]	[illegible]	[illegible]	167.45	19871211	165.20	
	D-19-12 36ADA	3038.00	[illegible]	[illegible]	[illegible]	[illegible]	122.70	19871210	99.60	
	D-19-12 36CAD	3119.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871210	135.00	
	D-19-12 36DDA	3075.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871210	77.40	
								19871214	77.40	
	D-19-13 03ABA UNSURV	2410.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871201	48.70	
	D-19-13 03ADC UNSURV	2417.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871201	85.70	
	D-19-13 05ACA1	2580.00	[illegible]	[illegible]	191.89	197902	237.64	19871201	232.00	
								19880606	232.90	
	D-19-13 08CAA	2445.00	[illegible]	[illegible]	[illegible]	19771215	137.60	19871201	67.20	
								19880606	65.00	
	D-19-13 21BAA	2367.00	19411224	[illegible]	[illegible]	[illegible]	84.60	19871201	31.80	
								19871210	33.40	
	D-19-13 29DDB	3010.00	[illegible]	[illegible]	[illegible]	[illegible]	62.00	19871202	53.20	
	D-19-13 31BDC	3080.00	[illegible]	[illegible]	[illegible]	19820109	104.85	19871214	77.20	
	D-19-13 31DCC	3050.00	19411028	[illegible]	[illegible]	[illegible]	58.18	19871214	35.90	
	D-19-14 13DCA	3980.00	[illegible]	[illegible]	[illegible]	19811026	60.20	19871209	28.59	
	D-19-14 14DCA	3762.10	[illegible]	[illegible]	[illegible]	[illegible]	84.30	19871203	84.30	
	D-19-14 14DCB	3760.00	19611026	[illegible]	41.30	19820412	49.61	19871203	41.30	
	D-19-14 27CDA2	4155.00	19820106	19871216	13.62	19820106	18.60	19871216	13.62	
	D-19-15 20DDB	4360.00	19811022	[illegible]	[illegible]	[illegible]	12.70	19871209	12.70	
	D-19-16 02CCD	4890.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871211	199.90	
	D-19-16 04DBD	5115.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871211	405.50	
	D-19-16 08AAA	5160.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871215	356.90	
	D-19-16 10CCA	4997.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871215	286.60	
	D-19-16 11BBB	4942.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871211	244.90	
	D-19-16 14BDD	4895.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871211	97.10	
	D-19-16 16DDB	4931.00	19820323	[illegible]	[illegible]	[illegible]	[illegible]	19871214	227.70	
	D-19-16 21ACC	5083.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871216	380.60	
	D-19-16 24CDA	4904.00	19820324	[illegible]	[illegible]	[illegible]	[illegible]	19871211	101.52	
	D-19-16 26BAD	4867.00	19820324	[illegible]	[illegible]	19820324	[illegible]	19871210	152.70	
	D-19-16 27BAC	4955.00	19820323	19871216	234.80	[illegible]	[illegible]	19871216	234.80	
	D-19-16 35DAD	4740.00	19410920	19871216	30.40	19811104	[illegible]	19871216	30.40	
	D-19-17 01CCD	4450.00	19820325	19871210	64.70	19820325	64.90	19871210	64.70	
	D-19-17 03DDD	4357.00	19820324	19871208	4.30	19820324	5.17	19871208	4.30	
	D-19-17 09ABB	4440.00	19820324	19871208	50.70	19820324	50.80	19871208	50.70	
	D-19-17 10BCD	4415.00	19820324	19820324	34.[illegible]	19871208	34.10	19871208	34.10	
	D-19-17 12AAB	4539.00	19820325	19871210	159.20	19820325	160.10	19871210	159.20	
	D-19-17 14ADD	4523.00	19721110	19871210	131.70	19820325	135.90	19871210	131.70	
	D-19-17 15BCA	4505.00	19820324	19871210	74.10	19820324	74.50	19871210	74.10	
	D-19-17 32ABD	4602.00	19820324	19820324	13.30	19871216	43.00	19871216	43.00	
	D-19-17 36CBA	4645.00	19820325	19871215	139.00	19820325	144.78	19871215	139.00	
	D-19-18 17BAD	4867.00	19820325	19871210	44.00	19820325	48.40	19871210	44.00	
	D-20-11 02DAC	3440.00	19640624	19871209	114.20	19820107	118.85	19871209	114.20	
	D-20-11 20DDB	3570.00	19820226	19871209	125.10	19820226	129.00	19871209	125.10	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
USC--Cont.	D-20-11 21DAA	3449.00	19640622	19850619	31.30	19640622	56.38	19871209	45.70	
								19880606	48.50	
	D-20-11 22ABC	3435.00	19641116	19871209	52.10	19820226	56.70	19871209	52.10	
	D-20-11 27BBA	3464.00	19640626	19871209	77.60	19640626	99.65	19871209	77.60	
	D-20-11 28CAC	3495.00	19820226	19871215	29.10	19820226	32.88	19871215	29.10	
	D-20-12 03DBC	3157.00	19460415	19460415	153.54	19820224	182.50	19871210	162.30	
								19871214	162.30	
	D-20-12 05AAD1	3215.00	19820225	19820225	11.80	19871210	12.20	19871210	12.20	
	D-20-12 05CBB	3272.00	19560225	19671121	16.30	19871210	22.02	19871210	22.02	
	D-20-12 10DDC	3285.00	19521106	19871210	277.70	19820224	296.50	19871210	277.70	
	D-20-12 12DAD	3089.00	19810730	19871214	32.50	19820311	48.20	19871214	32.50	
	D-20-12 17ACC	3470.00	19721115	19721115	14.34	19820224	77.20	19871210	49.90	
	D-20-12 19DCB	3658.00	19721115	19721115	62.80	19871210	67.90	19871210	67.90	
	D-20-12 36ADB	3220.00	19820106	19871215	79.50	19820106	80.20	19871215	79.50	
	D-20-13 06ACC	3052.00	19450322	19681120	19.88	19671120	52.69	19871214	28.50	
	D-20-13 06CBA	3064.00	19471117	19641211	27.80	19520709	59.39	19871214	35.90	
								19880606	53.70	[illegible]
	D-20-13 06DDC	3043.00	19550308	19871214	13.44	19631101	37.35	19871214	13.44	
	D-20-13 09DDD	3450.00	19721108	19871216	230.30	19721108	244.65	19871216	230.30	
	D-20-13 25CAB	3787.00	19721109	19721109	17.40	19811229	24.80	19871216	18.80	
	D-20-13 31AAC	3139.00	19391012	19871215	12.00	19540224	33.80	19871215	12.00	
	D-20-13 36ACD	3830.00	19811229	19871216	9.27	19811229	11.50	19871216	9.27	
	D-20-13 36CCD	3717.00	19811229	19871216	38.50	19811229	45.10	19871216	38.50	
	D-20-14 29CAA	4560.00	19811229	19871216	48.97	19811229	55.50	19871216	48.97	
	D-20-16 12DDA	4825.00	19491108	19491108	157.66	[illegible]	167.62	19871215	161.66	
	D-20-16 24DAD2	4875.00	19820128	19871214	209.30	19820128	212.76	19871214	209.30	
	D-20-16 26AAB	4809.00	19820317	19871214	120.70	19820317	124.87	19871214	120.70	
	D-20-16 27AAC1	4751.00	19820318	19871214	92.20	19820318	95.60	19871214	92.20	
	D-20-16 28ABC	4738.00	19721107	19871214	57.30	19721107	66.10	19871214	57.30	
	D-20-17 04AAC	4623.00	19820324	19871216	43.72	[illegible]	46.41	19871216	43.72	
	D-20-17 07ADD	4771.00	19820319	19871215	120.90	19820319	123.10	19871215	120.90	
	D-20-17 10DAB	4621.00	19721106	19871215	31.87	[illegible]	35.00	19871215	31.87	
	D-20-17 15CDC	4720.00	19820323	[illegible]	[illegible]	19820323	105.00	19871216	[illegible]	
	D-20-17 16DCA	4731.00	19820324	19871215	75.50	19820324	[illegible]	19871215	75.50	
	D-20-17 18ACC	4855.00	19820319	19871215	[illegible]	19820319	[illegible]	19871215	203.80	
	D-20-17 22CBA	4800.00	19820323	19871216	129.60	19820323	136.47	19871216	129.60	
	D-20-17 29BDB	4827.00	19820316	19871215	158.70	19820316	171.47	19871215	158.70	
	D-20-17 32BAA	4883.00	19820317	19871215	182.20	19820317	[illegible]	19871215	182.20	
	D-21-11 05DDC	3597.00	19820222	19871209	34.65	19820222	[illegible]	19871209	34.65	
	D-21-12 12DAA	3300.00	19521113	19871214	119.61	[illegible]	133.54	19871214	119.61	
	D-21-12 13ADA	3318.00	197201	19871214	124.40	197201	133.65	19871214	124.40	
	D-21-13 01CAC	3730.00	19820226	19871216	32.60	19820226	67.52	19871216	32.60	
	D-21-13 05DAA	3238.00	19520312	19871215	67.33	[illegible]	84.54	19871215	67.33	
	D-21-13 07ACD	3215.00	19641124	19871214	41.60	19641124	53.76	19871214	41.60	
	D-21-13 17ACC1UNSURV	3215.00	19820223	19820223	[illegible]	19871214	15.25	19871214	15.25	
	D-21-13 18CDB	3350.00	19820218	19871214	130.40	19820218	141.90	19871214	130.40	
	D-21-13 19DBC	3240.00	[illegible]	[illegible]	21.54	[illegible]	29.60	19871214	22.70	
								19880606	23.60	
	D-21-13 29CBCUNSURV	3252.00	19820125	[illegible]	[illegible]	[illegible]	21.75	19871214	8.00	
	D-21-13 30BAC	3330.00	19820216	19871215	103.90	[illegible]	111.20	19871215	103.90	
	D-21-13 30DBCUNSURV	3255.00	19820113	19820113	[illegible]	[illegible]	17.60	19871215	17.60	
	D-21-14 08CAA	4080.00	19721110	19721110	[illegible]	[illegible]	10.30	19871215	6.40	
	D-21-16 05CDB	4650.00	19820317	19820317	[illegible]	19871214	27.42	19871214	27.42	
	D-21-16 08ADD	4448.00	19820318	19871210	79.50	19820318	83.00	19871210	79.50	
	D-21-16 09ABA	4420.00	19491108	[illegible]	[illegible]	[illegible]	49.00	19871214	44.76	
	D-22-12 03AAA	3730.00	[illegible]	19871215	11.90	[illegible]	14.40	19871215	11.90	
	D-22-13 05BBB UNSURV	3285.00	19820125	19871214	13.00	19820125	36.02	19871214	13.00	
	D-22-13 16DC3 UNSURV	3350.00	19820113	19871215	6.54	19820113	12.20	19871215	6.54	
	D-22-13 25DDD UNSURV	3482.00	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19871208	52.10	
								19880606	56.50	
	D-22-13 27AAB UNSURV	3381.00	[illegible]	19611227	[illegible]	[illegible]	[illegible]	19871208	3.20	
	D-22-13 35DCD UNSURV	3430.00	19340512	[illegible]	[illegible]	[illegible]	[illegible]	19871208	13.50	
								19880606	21.30	[illegible]
	D-22-15 10CCC	4090.00	19811230	19871209	73.40	19811230	88.30	19871209	73.40	
	D-22-15 11DDC	3990.00	19391101	19391101	22.69	19820401	27.90	19871209	26.10	
	D-22-15 12AAD2	4034.00	19490831	[illegible]	8.42	[illegible]	25.97	19871209	12.80	
	D-22-16 09CDD	4185.00	19820310	19871209	31.40	19820310	37.97	19871209	31.40	
	D-22-16 23BDD	4450.00	19820312	19871209	4.30	19820312	6.10	19871209	4.30	
	D-22-16 35ABD	4596.00	19691105	19871209	24.00	19820309	25.33	19871209	24.00	
	D-22-17 31ADA	5145.00	19691106	19871210	111.30	19691106	124.89	19871210	111.30	
	D-23-13 01CAD	3445.00	19641130	19670113	5.20	19820226	22.60	19871215	13.90	
	D-23-13 13DAD2	3530.00	19820217	19871208	19.40	19820217	20.06	19871208	19.40	
	D-23-13 24DDC	3597.00	19820222	19820222	42.00	19871215	43.60	19871215	43.60	
	D-23-13 29CCC	3955.00	19820224	19871215	262.50	19820224	267.60	19871215	262.50	
	D-23-13 36ADB	3675.00	19820219	19820219	100.50	19871209	110.40	19871209	110.40	
								19880606	180.00	F
	D-23-14 15CCB1	3554.00	196412	196412	30.35	19871209	35.50	19871209	35.50	
	D-23-14 17ACA	3510.00	19390607	197301	11.60	195307	21.85	19871209	12.70	

See p. 303 for Ground Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
USC--Cont.	D-23-14 19BCD1	3550.00	19391018	19560106	6.90	19440720	17.85	19871209	9.20	
	D-23-14 22CDD1	3575.00	19391031	19831206	11.68	19830105	24.20	19871209	15.20	
								19880606	15.71	
	D-23-14 25CBB	3604.00	19820218	19871211	25.00	19820218	32.19	19871211	25.00	
	D-23-14 27AAA	3579.00	19820218	19820218	14.65	19871209	16.35	19871209	16.35	
	D-23-14 36BCB1	3620.00	19400315	196803	0.	19760130	49.15	19871209	30.10	
								19880606	32.40	
	D-23-15 19ABB	3895.00	19820222	19871210	133.57	19820222	136.20	19871210	133.57	
	D-23-15 31CCD	3652.00	193911	193911	6.33	19871210	17.30	19871210	17.30	
	D-23-16 08ABD UNSURV	5175.00	19721112	19871210	22.00	19820309	24.10	19871210	22.00	
	D-23-16 22B UNSURV	5410.00	19721112	19871210	9.10	19721112	12.90	19871210	9.10	
	D-23-17 10CBC2	4946.00	19820312	19871209	108.10	19820312	118.60	19871209	108.10	
	D-23-17 16DAC	4915.00	19820312	19871209	121.60	19820312	125.20	19871209	121.60	
	D-23-17 26BDD UNSURV	4755.00	19481005	19871209	7.33	19550921	18.24	19871209	7.33	
	D-23-17 33DBC UNSURV	4928.00	19820311	19871209	137.80	19820311	142.40	19871209	137.80	
	D-23-17 36AAB	4805.00	19721109	19871210	47.30	19721109	57.50	19871210	47.30	
	D-23-18 18BAC	4912.00	19820310	19871209	121.50	19820310	124.90	19871209	121.50	
	D-23-19 07ACD	5530.00	19811022	19871215	16.60	19811022	19.20	19871215	16.60	
	D-23-19 28BBD1	5580.00	19811021	19871215	15.20	19811021	16.30	19871215	15.20	
	D-24-14 18CBC	3960.00	19820218	19870609	209.40	19831221	245.90	19871210	209.60	
								19880606	210.40	
	D-24-15 04DDD1UNSURV	4018.00	19820223	19851202	88.40	19820223	99.80	19871210	97.20	
								19880606	97.20	
	D-24-15 04DDD2UNSURV	4018.00	19730226	19730226	208.10	19820223	285.90	19871210	280.10	
								19880606	379.10	P
	D-24-15 07AD UNSURV	3710.00	19480312	19581222	3.35	19740115	20.75	19871210	5.80	
	D-24-15 16DB UNSURV	3875.00	19811021	19871210	65.80	19811021	76.25	19871215	68.80	
	D-24-16 12BAB UNSURV	4998.00	19820309	19871209	196.00	19820309	206.70	19871209	196.00	
	D-24-17 02DCA UNSRV	4630.00	194810	194810	15.97	19871210	16.14	19871210	16.14	
	D-24-17 03BDB UNSURV	4775.00	19721113	19871209	42.05	19721113	45.50	19871209	42.05	
	D-24-17 04DBC UNSURV	4842.00	19820311	19871210	99.52	19820311	100.70	19871210	99.52	
	D-24-17 11ABD2	4676.00	19670112	19670112	7.83	19811027	12.20	19871215	9.52	
	D-24-19 11FAB	5310.00	19811021	19871215	9.20	19811021	11.40	19871215	9.20	
	D-24-19 14ABA	5250.00	19811021	19871215	13.90	19811021	15.70	19871215	13.90	
USC RES	D-15-13 16ADC	2482.00	19811222	19841107	54.50	19811222	68.88	19871130	60.60	
	D-15-13 21ABA2	2495.00	19840122	19840122	54.27	19811222	104.78	19871130	101.50	
	D-15-13 23AAD2	2525.00	197208	19870529	177.13	19811229	224.10	19871202	189.80	
								19880608	185.30	
	D-15-13 23CCB2	2514.24	195407	195407	45.20	19811217	153.70	19871202	149.60	
	D-15-13 25CDC	2550.00	194906	19530622	45.24	19811217	123.70	19871203	108.50	
	D-15-13 26ACB	2525.00	19720121	19720121	95.00	19871203	138.90	19871203	138.90	
	D-15-13 27AAC	2515.00	19540608	19540603	35.01	19811222	134.40	19871203	123.40	
	D-15-13 35BCD	2542.00	19760608	19760608	92.00	19811222	114.20	19871203	112.60	
	D-16-13S02BBA2	2561.00	193401	193401	19.67	19871203	115.80	19871203	115.80	
								19880607	111.10	
USP	D-16-20 27DCC2	3510.00	19470922	19810213	39.50	19640226	58.47	19880113	41.60	
	D-16-20 34ACD2	3537.00	19500920	19861219	71.70	19760126	90.10	19880113	75.90	
	D-17-19 06AAC	4060.00	19811222	19871216	184.20	19811222	185.00	19871216	184.20	
	D-17-19 08BAB	4085.00	19611229	19871216	224.80	19811229	225.70	19871216	224.80	
	D-17-21 05CAC	3795.00	19631115	19700119	216.70	19861204	239.85	19880226	238.30	
	D-17-21 32BAB	3705.00	19440907	19461209	16.92	19860313	48.00	19880225	44.47	
	D-18-20 01DAD2	3648.00	19440906	19460330	5.15	19760123	21.70	19880224	19.80	
	D-18-20 06BDD	4450.00	19661215	19860313	240.60	19770803	276.00	19880225	246.40	
	D-18-21 06AAB	3635.00	19440728	19880225	4.50	19560927	37.93	19880225	4.50	
	D-19-21 12DBA2	4045.00	19611124	19680327	212.10	19700114	226.84	19880224	217.20	
	D-19-21 24BCC	4030.00	19611126	19860313	190.70	19850111	211.10	19880224	195.40	
	D-20-17 23CDD	4861.00	19780803	19871216	214.20	19820317	227.00	19871216	214.20	
	D-20-17 24CDD	4810.00	19520924	19760114	143.60	19600410	159.80	19871216	148.14	
								19880224	148.70	
	D-20-18 05DAB	4900.00	19601019	19601019	46.79	19871215	62.30	19871215	62.30	
	D-20-18 17BCB	4802.00	19820317	19871215	168.90	19820317	181.20	19871215	168.90	
	D-20-18 19ACB	4837.00	19820317	19871216	227.20	19820317	241.60	19871216	227.20	
	D-20-18 19CCD2	4778.00	19820330	19820330	118.50	19871215	126.50	19871215	126.50	
	D-20-18 21CCC	4825.00	19820317	19871215	45.10	19820317	61.30	19871215	45.10	
	D-20-18 29DBD	4720.00	19820325	19820325	21.80	19871216	25.70	19871216	25.70	
	D-20-18 30CBC	4811.00	19820325	19871216	124.40	19820325	127.00	19871216	124.40	
	D-20-20 02DDD	4183.00	19601013	19740521	85.30	19880224	116.00	19880224	116.00	
	D-20-20 07BDB	4340.00	19810923	19880824	216.70	19830315	228.69	19871120	217.80	
								19880224	217.40	
								19880524	217.20	
								19880824	216.70	
	D-20-23 08BAA	4540.00	19611125	19611125	361.74	19850118	373.70	19880225	372.60	
	D-21-18 05A UNSURV	4760.00	19820325	19871215	22.22	19820325	24.98	19871215	22.22	
	D-21-18 30BCD	5073.00	19820331	19871215	29.71	19820331	30.45	19871215	29.71	
	D-21-20 16ADA1	4400.00	19711201	19711201	277.00	19880224	297.60	19871120	286.60	
								19880224	297.60	
								19880524	290.80	
								19880825	291.10	
	D-21-20 30BA UNSURV	4710.00	197111	197111	559.00	19730910	574.90	19871120	572.20	
								19880224	569.90	
								19880524	570.20	
								19880825	571.90	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
USP--Cont.	D-21-21 27DBB	4226.00	19830112	19830112	79.50	19861126	92.86	19880224	82.60	
	D-21-21 31CAB	4440.00	19730716	19731102	248.00	19880225	289.00	19880225	289.00	
	D-21-22 06ACD2	4130.00	19840302	19880225	26.10	19840302	28.70	19880225	26.10	
	D-21-23 29DBC	4485.00	19491201	19880224	251.80	19491201	400.00	19880224	251.80	
	D-22-18 15CBD	5115.00	19820617	19871215	26.20	19820617	39.37	19871215	26.20	
	D-22-20 10ABB	4677.00	19720819	19720819	525.00	19830122	558.40	19880225	548.30	
	D-22-20 24AAA2	4605.00	19740128	19851203	379.30	19880524	394.00	19871120	387.50	
								19880524	394.00	
								19880425	385.30	
	D-22-21 06BCC	4480.00	19720630	19720630	311.00	19880225	338.90	19880225	338.90	
	D-22-21 23CBA	4320.00	19630313	19630313	116.90	19830112	124.10	19880224	123.10	
	D-22-22 06DAB	4060.00	19640506	19880524	11.30	19830624	32.00	19871120	13.10	
								19880524	11.30	
								19880825	11.60	
	D-23-21 06CCC2	4825.00	[illegible]	[illegible]	5.40	[illegible]	39.55	[illegible]	6.70	
	D-23-22 16BDD	4230.00	19611105	[illegible]	[illegible]	[illegible]	81.50	[illegible]	82.41	
								[illegible]	[illegible]	
								[illegible]	82.10	
								[illegible]	[illegible]	
	D-23-22 18BBB	4360.00	[illegible]	[illegible]	[illegible]	[illegible]	134.48	[illegible]	[illegible]	
	D-23-22 21ACD	4195.00	[illegible]	[illegible]	[illegible]	[illegible]	36.31	[illegible]	[illegible]	
	D-23-22 33DCD2	4225.00	[illegible]	[illegible]	[illegible]	[illegible]	25.12	[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
	D-23-23 06BCC	4593.00	[illegible]	[illegible]	[illegible]	[illegible]	358.56	[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
	D-24-21 03AAB	4635.00	19811106	[illegible]	[illegible]	[illegible]	331.80	[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
	D-24-22 20BBA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	42.09	[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
	D-24-23 06AAA1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	225.88	[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
USR	A-01-15 04CBD1	3190.00	[illegible]	[illegible]	[illegible]	[illegible]	22.50	[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	21.14	
								[illegible]	[illegible]	
	A-01-15 04DCC1	3215.00	19641006	[illegible]	[illegible]	19880523	37.06	[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
	A-01-15 09AAD2	3237.00	[illegible]	[illegible]	[illegible]	[illegible]	65.46	[illegible]	[illegible]	
	A-02-07 02BAA	1382.00	[illegible]	[illegible]	[illegible]	19871224	61.10	[illegible]	[illegible]	
								[illegible]	[illegible]	
	A-02-15 07BDD1	2840.00	[illegible]	[illegible]	[illegible]	[illegible]	3.92	[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
	A-02-15 29DBD1	3030.00	19641010	[illegible]	[illegible]	[illegible]	25.02	[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
								[illegible]	[illegible]	
	D-01-15 13BDA	3800.00	[illegible]	[illegible]	[illegible]	[illegible]	32.99	[illegible]	[illegible]	
VER	A-14-05 17AAC	2190.00	[illegible]	[illegible]	29.33	[illegible]	70.26	[illegible]	[illegible]	
	A-14-10 32DBD	6855.00	19660606	[illegible]	[illegible]	19770131	348.60	[illegible]	[illegible]	
	A-15-03 12ADB1	3265.00	19581014	[illegible]	[illegible]	[illegible]	33.80	[illegible]	[illegible]	
	A-15-04 02CCB4	3420.00	19780124	19780124	81.90	19830401	91.19	19880511	[illegible]	
	A-15-04 04DDC1	3355.00	19590818	[illegible]	36.76	19770125	60.40	[illegible]	[illegible]	
	A-17-05 15ABD	4385.00	[illegible]	[illegible]	257.10	[illegible]	503.22	[illegible]	[illegible]	
	A-17-06 30BBB	4300.00	19601214	19770125	436.00	19620419	453.92	[illegible]	[illegible]	
	A-18-07 15CCB2	6450.00	19650722	[illegible]	65.60	19760122	157.60	[illegible]	[illegible]	
	A-18-07 15CCC1	6435.00	19670111	19880511	113.80	19760122	168.00	19880511	113.80	
[illegible]	B-41-15 33CAB	1910.00	19761103	19820303	54.20	19761103	74.60	[illegible]	57.20	[illegible]

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
WAT	C-02-01 19ADA	1111.00	19590114	19590114	265.71	19820121	389.30	19871221 19880616	335.40 333.90	
	C-02-01 20BAD	1130.00	19600927	19610118	300.39	19820121	399.00	19871221 19880616	348.20 346.60	
	C-02-01 33AAA	1169.00	19520601	19520601	266.30	19820125	391.70	19871221 19880616	363.40 364.80	
	C-02-01 33CDD	1142.00	19610215	19610215	298.80	19820125	362.70	19871221 19880616	332.70 334.20	
	C-02-02 05CDC	990.00	19600928	196101	145.31	19871221	211.40	19871221 19880616	211.40 208.70	
	C-02-02 09CCC	1023.00	19801229	19861203	312.50	19801229	342.80	19871221 19880616	314.90 314.60	 C
	C-02-02 10CCC	1015.00	19550125	19550125	142.29	19820119	318.90	19871221	281.60	
	C-02-02 12ACC	1070.00	19600928	19610118	258.16	19801222	354.00	19871221 19880616	318.00 319.80	
	C-02-02 25CCC	1078.00	19560103	19570228	222.80	19820119	368.20	19871221 19880616 19880711	333.40 368.40 372.20	 P P
	C-02-02 27CBB	1115.00	19660115	19660115	316.20	19820119	407.60	19871221 19880616 19880708	386.30 393.60 494.90	 P
	C-02-02 27CCC	1135.00	19540218	19540218	250.15	19810102	425.30	19871221 19880616 19880708	402.20 403.70 507.40	 P
	C-03-01 07ACC	1153.00	19700128	19700128	322.60	19820125	362.50	19871221 19880616	333.10 331.40	
	C-03-01 19DCC	1225.00	19721003	19721003	372.50	19861202	398.00	19871222 19880616	396.50 395.40	
	C-03-01 21DCC	1182.00	19590114	19590114	293.40	19850107	365.50	19871222 19880616	347.80 393.40	 P
	C-03-01 28DDD	1208.00	19620301	19620301	237.75	19860529	373.90	19871222 19880616	370.70 408.40	 P
	C-04-01 23CDB	1345.00	19840719	19840719	475.10	19880808	480.10	19871207 19871222 19880301 19880602 19880808	479.70 479.80 479.80 480.00 480.10	
	D-05-01 07BBB2	1272.30	19790504	19790504	405.22	19871221	420.80	19871221 19880616	420.80 420.70	
	D-04-01 28CDD	1338.00	19520423	19520423	338.50	19880616	418.40	19871222 19880616	417.60 418.40	
WHM	A-05-30 13DBC	8020.00	19711017	19641215	86.10	19791206	155.20	19880316	86.10	
	A-05-31 17CAA	7980.00	19730822	19670316	2.30	19730822	21.50	19880316	9.00	
	A-07-27 01CCA1	8280.00	19730726	19770112	41.10	19740726	55.00	19880316	49.80	
	A-07-27 01CDB	8260.00	19730726	19850423	20.05	19830316	28.00	19880316	21.60	
	A-07-30 14BDD	8021.00	19730508	19750102	153.20	19770112	192.90	19880316	155.30	
	A-09-22 36CBB	6745.00	196907	19640315	21.00	19770111	48.30	19880315	21.00	
	A-10-22 30ABA	6485.00	19690327	19550404	521.60	19740213	532.00	19880315	522.30	
WIL	D-09-23 08ABC	5150.00	19540520	19530205	205.35	19570124	295.87	19880223	232.20	
	D-12-23 12DBA	4280.00	19540129	19540129	92.42	19870115	201.10	19880211	162.10	
	D-12-23 14ABB	4275.00	19540611	19550324	88.30	19770203	164.10	19880211	148.20	
	D-12-24 20CBB	4245.00	19650210	19640124	122.80	19690219	147.20	19880211	129.60	
	D-13-24 03ADA	4224.00	19540126	19710122	10.48	19740114	154.40	19880120	100.70	
	D-13-24 05CCB2	4225.00	19540126	19540126	81.58	19810219	138.70	19880122	110.70	
	D-13-24 16BBB	4209.00	19420513	19420513	29.69	19770202	129.40	19880120	101.10	
	D-13-24 35BBC2	4185.00	19600119	19600119	40.15	19830202	54.00	19880211	52.60	
	D-14-24 14BBA2	4167.00	19630206	19630206	9.00	19880209	28.90	19880209	28.90	
	D-14-24 30DBA	4197.00	19420513	19551221	16.41	19740114	33.94	19880114	28.30	
	D-14-26 18BDD	4278.00	19540127	19540127	69.08	19760115	224.40	19880121	204.80	
	D-15-23 20CDD	4210.00	19530126	19530126	98.90	19880211	105.30	19880211	105.30	
	D-15-24 06CAD	4165.00	19750212	19750212	41.40	19880114	53.30	19880114	53.30	
	D-15-25 25ADA	4220.00	19540126	19540126	41.75	19750210	243.90	19880121	190.80	
	D-16-24 21CCC	4240.00	19590101	19590101	102.80	19870114	159.90	19880114	158.90	
	D-16-25 09ADD	4187.00	19530716	19630220	25.30	19880121	52.30	19880121	52.30	
	D-16-25 13CDD	4235.00	19530305	19530305	42.80	19761222	246.30	19880121	193.40	
	D-16-25 36AAA	4248.00	19590101	19590101	103.22	19760113	255.70	19880121	214.60	
	D-16-26 02AAD	4395.00	19590101	19590101	215.71	19820113	319.50	19880121	275.10	
	D-16-26 05DAD	4285.00	19540127	19540127	101.90	19800226	315.40	19880121	267.10	
	D-16-26 06DDA	4257.80	19640130	19640130	188.80	19740114	277.70	19880121	229.50	
	D-16-26 14DAA	4375.00	19540127	19540127	159.82	19760113	380.80	19880121	318.50	
	D-16-26 29AAA	4291.00	19531002	19540127	91.05	19780213	296.10	19880121	264.90	
	D-16-28 04BBB	4716.00	19490218	19490218	248.20	19700106	339.60	19880121	330.70	
	D-17-24 01DAC	4245.00	19530716	19530716	68.68	19830114	98.90	19880114	98.90	
	D-17-24 36CCC	4528.00	197502	197502	399.00	19880114	416.60	19880114	416.60	
	D-17-25 07ADD	4230.00	19530716	1954	44.00	19800228	127.20	19880114	120.20	
	D-17-25 08BCC	4230.00	19530716	19530716	59.75	19750212	131.50	19880114	122.90	
	D-17-26 04ADD	4300.00	19630206	19630206	170.13	19860114	252.50	19880121	251.00	
	D-17-26 12BAA	4335.00	19540126	19600122	13.23	19820113	250.40	19880114	235.00	
	D-17-27 01DAD	4620.00	19690303	19690303	263.85	19830119	338.00	19880209	283.40	
	D-17-27 21BCA	4420.00	19690304	19690304	188.00	19830119	250.00	19880209	238.10	
	D-17-27 35CCB	4500.00	19690303	19690303	179.60	19810220	235.00	19880209	217.80	
	D-17-28 06CDA	4632.00	19700107	19700107	300.60	19810220	337.90	19880209	308.40	

See p. 303 for Ground-Water Areas and abbreviations.
See codes used to identify Status at end of table.

WATER-LEVEL INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	LAND-SURFACE ALTITUDE	RECORDS BEGAN DATE	WATER LEVELS IN FEET BELOW LAND SURFACE						
				DATE	HIGHEST	DATE	LOWEST	DATE	1987	STATUS
WMD	C-17-07 24CDD	1245.00	19730711	19780108	81.80	19880728	94.10	19871014	91.40	
								19871216	91.70	
								19871229	91.80	
								19880217	91.80	
								19880510	92.20	
								19880728	94.10	
	C-17-08 09ADD UNSURV	1000.00	19740206	19761018	48.30	19781022	59.90	19871014	59.20	
								19871216	59.30	
								19880217	59.10	
								19880510	59.00	
								19880728	59.40	
	C-17-08 11DCD UNSURV	981.00	19740209	19790101	13.31	19860321	17.60	19871014	16.55	
								19871216	15.79	
								19880217	15.60	
								19880510	15.85	
								19880728	17.30	
	C-18-05 07AAA	1400.00	19811022	19840215	63.70	19860717	77.80	19871014	[illegible]	
								19871216	[illegible]	
								19880217	74.15	
								19880510	72.02	
								19880728	76.25	
	C-18-06 01DBB2	1432.00	19740807	19811216	78.30	19880728	84.50	19871216	82.90	
								19880217	[illegible]	
								19880510	83.40	
								19880728	[illegible]	
WMN	B-16-04 14BBB	4600.00	19521009	[illegible]	[illegible]	19561023	7.78	19880128	[illegible]	
YUM	C-08-21 21BCA	165.00	19430506	[illegible]	22.81	[illegible]	54.88	19880119	[illegible]	
	C-08-22 25DAC3	155.00	19540302	19780209	[illegible]	19540302	25.80	19880119	[illegible]	
	C-08-23 27DDD	134.00	19570131	[illegible]	[illegible]	19740110	20.63	19880119	[illegible]	
	C-08-24 34DDD	117.00	19770203	[illegible]	[illegible]	197802	12.20	19880202	[illegible]	
	C-09-21 07AAD	279.00	19611205	[illegible]	[illegible]	[illegible]	145.96	[illegible]	[illegible]	
	C-09-22 11BBB	217.00	19630208	[illegible]	[illegible]	[illegible]	75.73	19880119	[illegible]	
	C-09-22 17DCA	205.00	19450501	[illegible]	[illegible]	[illegible]	97.63	19880119	[illegible]	
	C-09-23 14CCC3	203.00	19610317	[illegible]	[illegible]	[illegible]	53.63	19880121	[illegible]	
	C-09-25 35CBD	104.00	19630131	[illegible]	[illegible]	[illegible]	21.74	19880121	[illegible]	
	C-10-23 15AAA	194.00	19610710	[illegible]	[illegible]	[illegible]	90.30	19880119	[illegible]	
	C-10-23 31BBB1	173.00	19611128	[illegible]	[illegible]	[illegible]	94.90	19880119	[illegible]	
	C-10-25 26CDB	90.00	[illegible]	[illegible]	[illegible]	19790124	14.62	19880119	[illegible]	
	C-11-21 04DDD	407.00	19820225	[illegible]	[illegible]	19821201	291.70	19880203	[illegible]	
	C-11-24 15CCC	156.00	19611229	19640513	[illegible]	[illegible]	95.90	19880121	[illegible]	
	C-11-24 23BCB	160.00	19630412	19651014	[illegible]	19830110	99.50	19880121	94.10	
	C-12-22 06DAA	202.00	19611219	[illegible]	[illegible]	19821201	145.30	19880121	[illegible]	

STATUS CODES

- F The site was flowing.
- O An obstruction was encountered in the well above the water surface (no water level is recorded)
- P The site was being pumped
- R The site had been pumped recently
- S A nearby site that taps the same aquifer was being pumped.
- V Foreign substance was present on the surface of the water

SITE INFORMATION

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
AGF	A-08-02 27CBB1	04	025	340527	1120858	15070102	H	100	--	--
AGF	A-11-02 25BDD	04	025	341816	1120613	15070102	P	200	--	--
AGF	A-12-01 26BAA3	04	025	342458	1121335	15070102	H	500	150.00 350.00	350.00 500.00
AGF	B-14-01 14ACC	04	025	343540	1121957	15070102	P	496	30.00	--
AGF	B-14-01 23ADC	04	025	343446	1121337	---	U	215.00	26. 175.	496 215.
ALT	D-20-08 35BDB	04	019	313850	1112357	15050304	H	650	495.00 598.00	595.00 650.00
ARA	D-08-21 10BAD	04	009	324343	1101315	15050203	S	--	---	--
AVR	D-15-10 32DBC	04	019	320434	1111937	15050304	I	616	302.00	353.00
BIC	B-21-02 14BCC	04	025	351207	1122837	15060201	P	1700	1390.00	1700.00
BIC	B-22-07 08DDD	04	025	351753	1130140	15060201	-	1004	704.00	--
BIC	B-24-08 17DCD2	04	025	352730	1130623	15060201	P	1750	1500.00	1750.00
BIS	B-18-13 22CCC1	04	015	344219	1133657	15030201	H	188	---	--
BIS	B-21-15 24DAC	04	015	351110	1134251	15030201	S	980	---	--
BLM	04 075 00.05X15.30	04	017	360157	1103005	15020012	H	--	--	--
BLM	06 114 13.71X05.12	04	017	354032	1104439	15020012	S	--	--	--
BLM	08 039 9.84X15.07	04	017	363151	1102538	15020018		3418	2460.0 3180.0	3180.0 3418.0
BLM	17 092 55.36X16.81	04	001	354523	1095043	15020011	H	--	--	--
BLM	CA 224 [illegible]2111921498	04	001	364656	1094254	---	-	--	--	--
BLM	PEABODY WELL NO.9	04	017	362333	1102500	15020018	K	--	--	--
BLM RES	[illegible] 056 07.11X04.13	04	017	362625	1102237	15020018	Z	3596	1947.00	3594.00
BLM RES	04 056 00.11X01.15	04	017	362901	1102341	15020018	Z	3737	2091.00	3735.00
BLM RES	04 056 04.80X05.85	04	017	362456	1102423	15020018	Z	3538	2147.00	3521.00
BLM RES	04 056 00.00X03.73	04	017	362647	1102435	14080204	Z	3535	2029.00	3458.00
BLM RES	08 039 06.68X17.11	04	017	363007	1102212	15020018	Z	3559	2047.00	3494.00
BLM RES	08 039 08.44X17.18	04	017	363005	1102509	15020018	Z	3636	1816.00	3603.00
BUT	B-[illegible]-15 02DDC	04	012	335823	1134715	15030105	I	520	300.00	520.00
BUT	B-[illegible]-18 15AAD3	04	012	335718	[illegible]	---	-	--	--	--
BUT	B-[illegible]-13 04DDD1	04	012	340333	[illegible]	15030105	U	1000	--	--
BWM	B-11-18 27DCB2	04	015	341548	1135525	15030204	I	115	--	--
CHI	B-04-19 29DCB	04	012	333946	1141531	---	-	--	--	--
CHI	B-14-20 33DCB	04	015	343022	1142134	---	-	--	--	--
CHI	B-[illegible]-22 12BDD	04	015	344711	1143343	---	-	--	--	--
CHI	B-17-22 11DCC	04	015	345159	1143516	15030101	I	--	--	--
CHI	B-[illegible]-22 23CCC	04	015	350348	1143545	15030101	H	-	--	--
CHI	B-[illegible]-22 01DAD1	04	015	350846	1143045	15030101	P	249	--	--
CHI	B-[illegible]-22 24DDC	04	015	350557	1133357	---	-	--	--	--
CHI	B-[illegible]-21 21CBB	04	015	351122	1142231	15030101	H	490.	108.	490
CHI	B-[illegible]-20 35AAA	04	015	353337	1142352	15010014	S	700.	--	--
CHI R	B-[illegible] 01DBC2	04	012	340653	1141732	15030104	P	400	263.00	400.00
CON	A-17-[illegible] 10ABA	04	001	342551	1093745	15020002	I	---	--	--
CON	A-[illegible]-24 22BBD	04	001	343048	1094754	15020002	S	680	--	--
CON	A-[illegible] 29DCC	04	001	343432	1095004	15020002	S	335	--	--
CON	A-10-25 14CCD	04	001	343623	1094032	15020002	S	350	--	--
DOU	D-[illegible] 09DBB	04	003	314225	1094140		-	--	--	--
DOU	D-[illegible]-20 25CBC	04	003	313941	1093926	-	H	300.00	--	--
DOU	D-2[illegible] 16AAA	04	003	312610	1093549	15080301	I	500	130.00	496.00
DOU	D-2[illegible] 22DDD	04	003	312433	1093449	15080301	H	350	--	--
DOU	D-24-[illegible] 17CDC	04	003	312059	1092226	---	-	--	--	--
DOU	D-24-[illegible] 12ABB	04	003	312145	1094524	15080301	S	--	--	--
DUN	[illegible] 20 111	35	023	323845	1084350	---	-	--	--	--
DUN	[illegible] 29 323	35	023	323722	1084940	---	S	290.00	140.	290.
DUN	[illegible] 32 333	35	023	323613	1085003	---	S	476.00	--	--
DUN	[illegible] 17.111	35	023	323426	1090222	---	-	--	--	--
DUN	D-[illegible] 01DAA	04	011	325655	1091350	15040002	-	280	260.00	--
DUN	D-[illegible] 04BCA1	04	011	325124	1091057	---	-	--	--	--
DUN	D-[illegible] 03AAA5	04	011	324109	1090252	00000000	I	80.00	20.	81.
DUN	D-09-[illegible] 03BAA	04	011	324110	1090322	---	-	--	--	--
GIL	C-[illegible] 01ADD	04	013	325700	1124159	15070101	I	1217	80.00 505.00 1100.00	505.00 1100.00 1217.00
GIL	C-[illegible] 10BCB	04	013	325518	1125211	---	-	--	--	--

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
GRD	C-04-08 16AAB	04	013	330500	1130502	--	-	--	--	--
GRD	C-04-08 33ADD	04	013	330159	1130450	--	-	--	--	--
GRD	C-04-10 02CBB	04	013	330632	1131614	15070201	-	990	720.00 961.00	961.00 990.00
GRD	C-04-10 21BBB2	04	013	330402	1131816	15070201	-	1414	1380.00	1414.00
GRD	C-04-11 02BBC	04	027	330648	1132225	15070201	I	530	--	--
GRD	C-04-11 08ABB	04	027	330607	1132458	15070201	I	--	--	--
GRD	C-04-11 29DBB	04	027	330305	1132502	--	-	--	--	--
GRD	C-05-08 03ACD	04	013	330122	1130404	15070201	I	1346	--	--
GRD	C-05-09 12CDA	04	013	330009	1130831	--	-	--	--	--
GRD	C-05-10 16CBC2	04	013	325927	1131817	15070201	I	360	--	--
GRD	C-05-10 28DCB	04	013	325736	1131746	15070201	I	1291	--	--
GRD	C-05-11 15ACC	04	027	325938	1132252	--	-	--	--	--
GRD	C-05-12 16BBB	04	027	325959	1133034	15070201	I	457	--	--
GRD	C-06-09 32CCB	04	027	325129	1131240	15070201	H	1030	--	--
GRD	C-06-12 19ADB	04	027	325338	1133139	--	-	--	--	--
GRD	C-06-13 03ABB	04	027	325632	1133458	--	-	--	--	--
GRD	C-07-11 36DDD	04	027	324604	1132004	15070202	I	546	--	--
GRD	C-07-12 13DCD	04	027	324841	1132636	15070202	I	944	319.00 479.00 940.00	479.00 940.00 944.00
GRD	C-07-12 21BDC2	04	027	324819	1133002	--	-	--	--	--
GRD	C-07-13 24ADA	04	027	324825	1133228	--	-	--	--	--
GRD	C-11-06 10BAA3	04	019	322922	1125225	15070202	U	58.0	--	--
GRD	C-11-06 24BDA	04	019	322726	1125020	--	-	--	--	--
GRD	C-12-04 21DAC	04	019	322155	1124047	--	-	--	--	--
GSK	A-01-16 19BAB	04	007	332507	1104250	--	-	--	--	--
GSK RES	A-01-18 17ACB	04	007	332554	1102913	15040007	S	--	--	--
GSK RES	A-01-18 28CAD	04	007	332355	1102815	15040007	S	--	--	--
GSK RES	A-02-17 34BBA	04	007	332842	1103348	15040007	S	--	--	--
GSK RES	D-01-17 10ABB	04	007	332159	1103539	15040007	P	--	--	--
GSK RES	D-01-17 21DDD	04	007	331932	1103619	15040007	S	--	--	--
GSK RES	D-01-18 12DCD2	04	007	332117	1102715	15040007	P	--	--	--
GSK RES	D-01-18 25DAB1	04	007	331857	1102709	15040007	U	109.	57	92
GSK RES	D-01-18 36DDD	04	009	331744	1102658	15040007	P	50.	--	--
GSK RES	D-01-19 30CDB	04	009	331844	1102638	15040007	P	--	--	--
GSK RES	D-02-18 21CBC	04	007	331433	1103058	15040005	S	--	--	--
GSK RES	D-02-20 11ABB	04	009	331646	1101552	15040005	S	--	--	--
GSK RES	D-03-18 05CDC	04	007	331140	1103146	15040005	P	--	--	--
GSK RES	D-03-19 11CAC	04	009	331103	1102226	15040005	S	--	--	--
GTD	C-07-15 24CBA	04	027	324811	1134538	--	-	--	--	--
GTD	C-07-15 26DDD	04	027	324657	1134552	15070201	D	96.0	45.00	94.00
GTD	C-08-15 06BBB	04	027	324557	1135046	15070201	D	--	65.00	93.00
GTD	C-08-16 02AAA	04	027	324557	1135203	15070201	D	97.0	50.00	82.00
GTD	C-08-16 05BBB	04	027	324556	1135604	15070201	D	99.0	60.00	96.00
GTD	C-08-16 18DCC	04	027	324325	1135634	15070201	U	60.0	27.00	51.00
GTD	C-08-17 03DDD	04	027	324506	1135916	--	-	--	--	--
GTD	C-08-17 09CCC	04	027	324414	1140116	15070201	D	83.0	--	--
GTD	C-08-17 12AAA	04	027	324503	1135715	15070201	D	98.0	--	--
GTD	C-08-17 14DCC	04	027	324324	1135842	15070201	U	94.0	58.00	--
GTD	C-08-18 20CBB	04	027	324251	1140830	15070201	U	86.0	60.00	--
GTD	C-08-18 25BAA	04	027	324225	1140355	--	-	--	--	--
GTD	C-08-18 29DDC	04	027	324135	1140739	15070201	D	100	77.00	99.00
GTD	C-08-18 34ACC	04	027	324111	1140551	15070201	D	159	55.00 85.00	71.00 140.00
GTD	C-08-20 00BCB	04	027	324448	1141948	15070201	D	--	60.00	130.00
GTD	C-08-20 15BCD2	04	027	324344	1141822	--	-	--	--	--
GTD	C-09-19 02AAA	04	027	324040	1141032	--	-	--	--	--
GTD	C-09-19 04BBB	04	027	324040	1141335	15070201	D	91.0	60.00	105.00
GTD	C-09-19 13AAC	04	027	323845	1140943	--	-	--	--	--
GTD	C-12-06 35DCA	04	019	322003	1125112	--	-	--	--	--
GTD	C-12-08 17ADA	04	019	322306	1130608	15070203	S	30.0	--	--
GTD	C-13-05 25CBD	04	019	321545	1124426	15070202	P	1060	--	--
GTD	C-14-07 35AAD2	04	019	321010	1125655	--	-	--	--	--
HAR	B-05-09S02BBD	04	013	334830	1131024	15070104	S	--	--	--
HAR	C-01-09 05CCC	04	013	332149	1131246	15070104	U	1000	--	--
HAS	B-07-05 01CDB	04	013	335825	1124353	15070103	P	110	50.00	96.00
HUA	B-22-16 28BDA2	04	015	351552	1135908	--	-	--	--	--
HUA	B-23-13 20CCD	04	015	352130	1134151	15010007	P	355	--	--
HUA	B-24-12 09AAD	04	015	352904	1133334	15010007	P	385.00	--	--
HUA	B-26-18 03AAA1	04	015	354036	1141106	15010007	H	705	570.00	697.00
HUA	B-29-17 23CCB	04	015	355258	1140503	15010005	P	984	895.00	975.00
LHA	B-02-06 20DAA	04	013	333001	1125304	15070104	I	1032	72.00 528.00	529.00 1012.00
LIC	B-16-02 03DDC4	04	025	344723	1122657	15060202	H	120	--	--
LIC	B-17-02S34ABB	04	025	344818	1122722	15060202	I	587	176.00	--

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (CWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
LSC	D-04-03 04DDD	04	021	330618	1112518		-	--	--	--
LSC	D-05-03 16CCC2	04	021	325907	[illegible]	[illegible]	I	935	640.00	905
LSC	D-05-07 23DDA	04	021	325813	[illegible]		I	1500.00	--	--
LSC	D-06-03 32DCC	04	021	325246	[illegible]	[illegible]	I	503	165.	481
LSC	D-06-04N04ABB	04	021	325617	[illegible]		-	--	--	--
LSC	D-06-04S04DDD3	04	021	325523	1115544		P	755.00	--	--
LSC	D-06-07 15ADC2	04	021	325407	[illegible]		-	--	--	--
LSC	D-07-04W01DAD	04	021	325041	[illegible]		I	1458.00	500.	822
									764.	1356.
									1356	1458
LSC	D-07-06 28DDD2	04	021	324640	[illegible]	[illegible]	I	270	115.00	190
									200.	270
LSC	D-07-06 34CDD1	04	021	324550	[illegible]	[illegible]	U	606	200.00	250
									250.	606.
LSC	[illegible]	04	021	323341	[illegible]	[illegible]	I	562	416.00	562
LSC	[illegible]	04	021	[illegible]	[illegible]	[illegible]	I	1000	250.00	980.00
LSC	D-10-08 10AAD2	04	021	323412	[illegible]		I	752.00	--	--
LSC	[illegible]	04	021	323442	[illegible]	[illegible]	I	[illegible]	170.	450.
LSC	D-10-10 05DBA	04	021	[illegible]	[illegible]	[illegible]	I	603.00	240.00	590
LSC	[illegible]	04	019	[illegible]	[illegible]	[illegible]	I	[illegible]	[illegible]	480.00
LVR	A-03-06 15ABA	04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	735	[illegible]	735.00
									447	735.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	I	[illegible]	[illegible]	--
[illegible]	B-27-09 11AAA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	I	1212	--	--
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
									[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	435
									423.	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]					
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	H		[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	H	[illegible]		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		H			
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1350.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]
SAF	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
									[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	I	[illegible]	[illegible]	82.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		-	--	--	--
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			--	--	--
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	--	--	--
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	H	--	--	--
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	--	--	--
[illegible]	[illegible]	04	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--	--	--
[illegible]	[illegible]	04	[illegible]	[illegible]	[illegible]	[illegible]	I	125.	--	--
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	--	--	--
[illegible]	[illegible]	04	009	[illegible]	[illegible]	[illegible]	I	--	--	--
[illegible]	[illegible]	04	003	[illegible]	[illegible]	[illegible]	[illegible]	583	--	--
[illegible]	[illegible]	04	013	[illegible]	[illegible]	[illegible]	I	453	[illegible]	432
[illegible]	[illegible]	04	013	[illegible]	[illegible]		-	--	--	--
[illegible]	[illegible]	04	013	[illegible]	[illegible]		I	1607.00	428.	933.
									933.	1607.
[illegible]	[illegible]	04	013	[illegible]	[illegible]	[illegible]	C	800	--	--
[illegible]	[illegible]	04	021	332135	[illegible]	[illegible]	P	1002	--	--
[illegible]	[illegible]	04	021	331756	[illegible]	--	-	--	--	--
[illegible]	A-02-05 14AAA	04	013	333126	[illegible]	[illegible]	I	1000	--	--
[illegible]	[illegible]	04	003	321552	[illegible]	[illegible]	-	863.00	403.00	--
[illegible]	D-18-32 33CAA	04	003	314930	[illegible]	--	S	--	--	--
[illegible]	D-20-32 29ABB	04	003	314001	[illegible]	[illegible]	H	412	--	--
[illegible]	D-21-31 03BCD2	04	003	313758	[illegible]		-	--	--	--
[illegible]	A-12-28 19BAD	04	001	342548	1092503	15020002	I	650	--	--
[illegible]	A-13-27 13A	04	001	343215	[illegible]	15020002	S	--	--	--
[illegible]	A-14-27 35BDC	04	001	343439	[illegible]	15020002	S	156	--	--

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
USC	D-11-14 32CCC	04	019	322528	1105633	15050301	P	522.00	160. 310.	310. 522.
USC	D-12-12 16DDD	04	019	322252	1110650	15050301	I	234	68.00	225.00
USC	D-14-14 02BBB	04	019	321457	1105327	15050302	P	251	150.00	251.00
USC	D-16-15 14ACB	04	019	320238	1104654	15050301	C	905	445.00	900.00
USC	D-17-14 07DDD	04	019	315728	1105639	15050301	I	1500	150.00 150.00 700.00 1499.00	728.00 720.00 1499.00 1500.00
USC	D-19-13 29CBB	04	019	314446	1110233	--	-	--	--	--
USC	D-19-17 17BBD	04	019	314715	1100802	15050302	S	845	--	--
USC	D-22-13 27AAB UNSURV	04	023	312929	1105942	15050301	I	78.0	10.00	78.00
USC	D-22-13 34ADD UNSURV	04	023	312818	1105840	15050301	I	200	30.00	200.00
USC	D-23-17 14CDD	04	023	312538	1103516	15050301	S	35.00	--	--
USC	D-24-14 05ADB2	04	023	312223	1105542	15050301	N	550	--	--
USP	D-13-22 33DAC	04	003	321526	1100557	15050202	S	1435	454.00	1435.00
USP	D-16-18 36AAA	04	019	320018	1102711	--	-	--	--	--
USP	D-17-20 22DDB	04	003	315614	1101703	15050202	I	550	460.00	550.00
USP	D-17-21 31DCA2	04	003	315426	1101405	15050202	I	380	--	--
USP	D-17-21 31DDA2	04	003	315428	1101348		-	--	-	--
USP	D-18-21 09BBB1	04	003	315322	1101241	15050201	H	635	300.00	635.00
USP	D-18-21 10DCB	04	003	315244	1101111	15050202	S	60.0	--	--
USP	D-18-21 28DBA	04	003	315018	1101204	15050202	-	400	--	--
USP	D-19-19 33BBA	04	003	314435	1102454	15050202	H	380	--	--
USP	D-19-20 30DAA	04	003	314501	1101959	-	-	--	--	--
USP	D-19-21 14AAC	04	003	314707	1100956	15050202	S	152	--	--
USP	D-20-17 35ABB	04	003	313929	1103442	15050202	S	--	--	--
USP	D-20-20 16CBB	04	003	314142	1101854	15050202		192	--	--
USP	D-20-21 14BCCUN	04	003	314141	1101049		-	--	--	--
USP	D-20-22 29ABD	04	003	314008	1100657	15050202	S	--	--	--
USP	D-21-21 11AAC	04	003	313728	1101031	15050202	H	90.0	-	--
USP	D-22-20 01BCA	04	003	313203	1101611	15050202	P	710.00	491. 642.	642. 710
USP	D-24-21 03AAB	04	003	312255	1101133	-	-	--	--	--
USP	D-24-24 05AAB	04	003	312245	1095517		-	--	--	--
USR	A-01-15 04CBD2	04	007	332717	1105019	15060103	U	47.1	43.8 47.00	46.8 50.00
USR	A-01-15 09DBC1	04	007	332629	1104958	15060103	U	118.4	115.1 115.00	118.1 118.00
USR	A-01-15 09DBC3	04	007	332629	1104958	15060103	U	62.7	59.4 59.00	62.4 62.00
USR	A-01-15 09DBC4	04	007	332629	1104958	15060103	U	36.6	33.3 34.00	36.3 37.00
USR	A-01-15 09DBC5	04	007	332629	1104958	15060103	U	160.2	155.	158.
USR	A-01-15 09DCD1	04	007	332611	1104951	15060103	U	109.7	106.4 106.00	109.4 109.00
USR	A-02-15 07BDD1	04	007	333151	1105205	15060103	U	55.8	50.6	53.6
USR	A-02-15 07BDD3	04	007	333151	1105205	15060103	U	82.0	76.8	79.8
USR	A-02-15 28DDD3	04	007	332904	1105048	15060103	U	42.00	39.4 39.00	42.4 42.00
USR	A-02-15 28DBD4	04	007	332904	1105048	15060103	U	181.4	176.2	179.2
VER	A-20-27 20CCA	04	005	350547	1114157	15060202	P	1210	637.00 968.00	968.00 1210.00
WAT	C-02-01 30DBA	04	013	331430	1122350	15070101	I	600	300.00 592.00	592.00 600.00
WAT	C-02-02 19AAD	04	013	331437	1122044	15070101	H	434	301.00	351.00
WAT	C-04-01 21CCC	04	013	330351	1121614	15070101	I	846	--	--
WIL	D-08-23 21ABC2	04	009	323031	1095955	--		--	--	--
WIL	D-13-24 05BAB	04	003	322023	1095513	--	-	--	--	--
WIL	D-13-25 31CAB2	04	003	321522	1095012	15050201	I	74.0	--	--
WIL	D-14-25 11CAA	04	003	321322	1094553	--	-	--	--	--
WIL	D-14-27 29CDA	04	003	321100	1093644	--		--	--	--
WIL	D-15-24 06BCD	04	003	320936	1095624	--		--	--	--
WIL	D-15-24 20CAC	04	003	320645	1095515	15050201		250	--	--
WIL	D-16-23 19ACB	04	003	320155	1100216	--	-	--	--	--
WIL	D-16-24 07BAB	04	003	320349	1095636	--	-	--	--	--
WIL	D-16-27 27AAA	04	003	320116	1093433	15050201	S	--	--	--
WIL	D-17-26 12CDD	04	003	315755	1093908	--	-	--	--	--
WIL	D-17-27 30AAD	04	003	315557	1093740		-	--	--	--
WIL	D-17-28 14CCB3	04	003	315703	1092823	--	-	--	--	--
WIL	D-18-25 05BDA	04	003	315408	1094922	15050201	T	420	--	--
WIL	D-18-28 09AAA	04	003	315319	1092928	15050201	H	--	--	--
WMD	C-17-05 17ABC2UNSRV	04	019	315702	1124804	15080102	H	420	350.00 400.00	-- 410.00
WMD	C-17-07 18DAC	04	019	315640	1130103	15080102	U	--	--	--

See codes used to identify State, County, and Primary Use of Water at end of table.

SITE INFORMATION--Continued

GROUND-WATER AREA	LOCAL WELL NUMBER	STATE	COUNTY	LATITUDE (DEGREES)	LONGITUDE (DEGREES)	HYDROLOGIC UNIT (OWDC)	PRIMARY USE OF WATER	DEPTH OF WELL (FEET)	TOP OF OPEN INTERVAL (FEET)	BOTTOM OF OPEN INTERVAL (FEET)
YUM	C-08-20 25CBB	04	027	324158	1141641	--	--	--	--	--
YUM	C-08-22 13BDD2	04	027	324410	1142815	15030107	I	146	109.00	--
YUM	C-08-22 18CBD	04	027	324358	1143337	15030107	I	173	110.00	--
YUM	C-08-22 25DDD	04	027	324159	1142739	15070201	I	162	101.00	162.40
YUM	C-08-22 27DDD	04	027	324158	1142943	15070201	I	166	94.00	165.30
YUM	C-08-22 28CCC	04	027	324158	1143141	15070201	I	169	116.00	168.70
YUM	C-08-22 35CCB3	04	027	324115	[illegible]	--	--	--	--	--
YUM	C-09-21 20ADA	04	027	324234	[illegible]	[illegible]	N	128	100.00	118.00
YUM	C-09-23 35AAC	04	027	324143	[illegible]	[illegible]	D	195	125.00	195.00
YUM	C-09-24 27ABA2	04	027	[illegible]	[illegible]	--	--	--	--	--
YUM	C-09-21 [illegible]CAA1	04	027	[illegible]	[illegible]	--	--	--	--	--
YUM	C-09-23 [illegible]	04	027	[illegible]	[illegible]	--	--	--	--	--
YUM	[illegible]	04	027	[illegible]	[illegible]	[illegible]	I	[illegible]	204.00	214.00
YUM	[illegible]	04	027	[illegible]	[illegible]	--	--	--	--	--
YUM	[illegible]	04	027	[illegible]	[illegible]	--	--	--	--	--
YUM	[illegible]	04	027	[illegible]	[illegible]	--	--	--	--	--
YUM	[illegible]	04	027	[illegible]	[illegible]	--	--	--	--	--
YUM	[illegible]	04	027	[illegible]	[illegible]	[illegible]	I	[illegible]	98.00 192.00 [illegible] [illegible] [illegible]	113.00 222.00 [illegible] [illegible] 495.00
YUM	[illegible]	04	027	[illegible]	[illegible]	--	--	--	--	--
YUM	[illegible]	04	027	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	178.00
YUM	[illegible]	04	027	[illegible]	[illegible]	[illegible]	I	[illegible]	[illegible]	--
YUM	[illegible]	04	027	[illegible]	[illegible]	[illegible]	I	--	--	--

[illegible]

[illegible]

04 [illegible]

[illegible]

Primary Use of Water

C Commercial
D Dewater
H Domestic
I Irrigation
K Mining
N Industrial
P Public Supply
S Stock
T Institution
U Unused
Z Other

WATER-QUALITY DATA

LOCAL IDENT-I-FIER	STATION NUMBER	DATE	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
AGUA FRIA BASIN									
A-09-02 27CBB1	340527112085801	03-23-88	520	7.40	21.0	180	50	13	41
A-11-02 25BDD	341816112061301	07-05-88	650	7.30	20.0	300	85	21	27
A-12-01 26BAA3	342458112133501	07-05-88	810	7.40	17.5	340	97	24	46
B-14-01 14ACC	343540112195701	03-07-88	500	7.80	18.5	230	66	16	18
B-14-01 23ADC	343446112193701	08-01-88	485	7.20	17.5	230	64	16	17
ALTAR VALLEY									
D-20-08 35BDB	313850111295701	03-08-88	460	8.00	32.0	52	16	2.9	69
ARAVAIPA VALLEY									
D-08-21 20BAD	324343110131501	07-13-88	390	7.30	19.0	150	41	11	24
AVRA VALLEY									
[illegible]-15-10 33DBC	320434111193702	03-08-88	680	7.70	28.0	150	50	7.0	78
BIG CHINO VALLEY									
B-21-22 14BCC	351207112283701	03-08-88	61[illegible]	7.70	24.5	200	52	18	48
B-22-07 08DDD	351740113014001	07-05-88	47[illegible]	7.40	24.0	230	56	22	7.4
B-24-08 17DCD2	352710112061502	03-08-88	46[illegible]	7.50	28.0	200	44	23	18
BIG SANDY VALLEY									
B-16-13 22CCD1	344210113365701	03-17-88	544	9.10	25.0	6	2.6	0.44	100
B-21-14 24DAC	351110113425101	08-11-88	458	7.80	31.5	140	21	22	45
BLACK MESA									
04-075-00.05X15.30	[illegible]	11-18-87	525	7.65	14.5	160	43	12	56
08 114-13.71X05.12	[illegible]	11-16-87	91[illegible]	7.75	10.0	290	94	13	89
08 039-9.64X15.[illegible]	[illegible]	03-03-88	47[illegible]	7.64	29.5	69	22	3.3	71
		03-05-88	75[illegible]	8.21	23.5	100	31	6.2	130
17 092-05.36X16.81	[illegible]	11-18-87	241	7.12	8.5	110	37	5.0	5.7
8A-224 0802111921400	[illegible]	11-17-87	178	7.87	11.5	78	25	3.9	4.7
PEABODY WELL NO.9	[illegible]	12-02-87	145	9.54	32.0	9	3.6	0.03	31
04 056-07.11X04.13	[illegible]	12-02-87	171	9.15	32.5	--	3.9	<0.01	35
04 056-08.11X01.15	362901110234101	01-05-88	27[illegible]	9.41	32.0	8	3.3	0.04	61
04 056-08.60X05.85	362456110242301	01-05-88	24[illegible]	9.46	32.0	10	3.5	0.10	49
04 056-09.00X03.73	362647110243501	12-02-87	184	9.13	32.5	--	4.8	<0.01	41
08 039-06.68X17.11	363007110221201	01-05-88	173	9.58	34.0	11	4.3	0.05	38
08 039-09.44X17.18	363005110255901	12-02-87	149	8.81	32.0	23	8.9	0.17	26
BUTLER VALLEY									
B-07-15 02DDC	335823113471501	06-07-88	570	8.20	27.5	23	8.0	1.5	110
B-07-16 15AAD3	335718113480501	03-15-88	630	8.50	26.5	52	16	1.6	150
B-09-13 04DDD1	340333113363701	10-21-87	520	7.90	31.0	130	42	7.0	60
		03-15-88	550	7.90	31.5	130	41	7.2	62
[illegible]									
[illegible]	341548113551501	07-06-88	1580	7.10	23.0	260	67	22	110
[illegible] AREA, BEAVER DAM TO IMPERIAL DAM									
[illegible]	333946114150101	03-07-88	715	7.70	26.0	200	64	9.3	73
[illegible]	343022114213401	07-06-88	1760	7.00	29.5	360	78	39	200
[illegible]	344711114334301	03-15-88	940	7.70	18.5	290	76	25	73
[illegible]	345200114352001	03-15-88	3090	7.60	22.5	900	240	73	450
[illegible]	350046114354501	03-17-88	1080	7.40	25.5	410	110	33	110
[illegible]	350846114334501	03-16-88	2460	7.50	27.0	680	190	50	180
[illegible]	350557113335701	03-15-88	2370	7.70	37.0	540	190	15	230
[illegible]	351120114320001	03-16-88	780	8.40	33.0	26	10	0.34	150
[illegible]	353337114235201	03-09-88	355	8.20	28.0	77	18	7.7	42
[illegible]	340853114173201	03-07-88	146	8.00	27.0	96	30	1.4	250
[illegible]									
A-12-26 19ABA	342551109374501	03-16-88	162	8.10	14.0	71	14	8.7	8.2
A-13-24 22BBD	343048109475401	03-15-88	490	7.75	15.0	230	62	19	16
A-14-24 28DCC	343432109500401	03-15-88	615	7.75	18.0	270	72	23	22
A-14-25 14CCD	343623109403201	03-15-88	700	7.55	17.0	290	68	29	37

WATER QUALITY DATA--Continued

LOCAL IDENT-I-FIER	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
AGUA FRIA BASIN										
A-03-02 27CBB1	1	2.1	168	58	12	0.40	19	312	0.690	0.020
A-11-02 25BDD	0.7	1.4	236	14	35	0.20	36	410	1.20	0.010
A-12-01 26BAA3	1	0.80	278	77	46	0.20	13	479	1.80	<0.010
B-14-01 14ACC	0.5	1.1	153	66	7.5	0.10	24	325	1.70	0.010
B-14-01 23ADC	0.5	0.70	172	51	16	0.20	20	234	1.50	<0.010
ALTAR VALLEY										
D-20-08 35BDB	4	[illegible]	142	25	9.4	6.4	30	245	1.30	<0.010
ARAVAIPA VALLEY										
D-05-21 [illegible]BAD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.40	41	250	[illegible]	0.020
AVRA VALLEY										
D-15-10 33BBC	3	[illegible]	[illegible]	[illegible]	[illegible]	1.3	31	392	9.30	<0.010
BIG CHINO VALLEY										
B-21-22 14BCC	[illegible]	[illegible]	[illegible]	[illegible]	18	0.20	16	269	2.80	<0.010
B-22-02 06DDD	0.2	3.2	[illegible]	[illegible]	15	0.10	15	263	3.30	<0.010
B-24-08 17DCD2	0.8	[illegible]	[illegible]	[illegible]	13	0.35	20	260	1.60	<0.010
BIG SANDY VALLEY										
B-16-13 22CCC1	16	[illegible]	[illegible]	45	41	2.6	18	296	1.20	<0.010
B-21-14 24DAC	2	[illegible]	[illegible]	[illegible]	9.0	<0.10	44	288	1.20	<0.010
BLACK MESA										
04-075-00 05X15.30	2	2.2	[illegible]	[illegible]	[illegible]	[illegible]	15	354	3.30	<0.010
08 114-13 71X05.12	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	647	3.60	<0.010
08 039 9.84X15.07	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	311	1.30	0.070
	6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18	538	2.10	<0.010
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4.4	[illegible]	15	157	0.480	0.030
8A 224 [illegible]	0.7	[illegible]	[illegible]	[illegible]	3.4	[illegible]	13	105	1.40	0.010
PEABODY WELL NO 9	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	119	0.720	0.090
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	19	--	0.800	<0.010
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.1	0.32	21	187	0.860	0.010
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6.4	[illegible]	21	179	0.740	<0.010
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	21	--	0.970	<0.010
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.20	22	133	0.640	<0.010
[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	0.20	21	145	0.940	<0.010
BUTLER VALLEY										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	48	5.1	17	340	4.80	<0.010
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	16	477	1.90	<0.010
[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	0.20	30	324	2.90	<0.010
	2	3.3	152	[illegible]	[illegible]	0.20	30	328	3.00	<0.010
[illegible] WILLIAMS										
[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	34	612	3.20	0.030
COLORADO RIVER [illegible] IMPERIAL DAM										
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.70	35	463	1.30	<0.010
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	23	1040	1.20	<0.010
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12	570	<0.100	<0.010
[illegible]	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	2400	0.100	<0.010
[illegible]	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	601	<0.100	<0.010
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	27	1290	9.90	<0.010
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	49	1320	0.670	<0.010
[illegible]	11	[illegible]	[illegible]	[illegible]	[illegible]	4.4	18	475	20.0	<0.010
[illegible]	2	[illegible]	111	[illegible]	[illegible]	0.40	32	225	6.50	<0.010
[illegible]	12	[illegible]	77	[illegible]	[illegible]	2.6	21	820	2.10	<0.010
[illegible]										
A-12-26 10ABA	[illegible]	3.0	76	4.1	3.5	0.20	30	120	[illegible]	0.060
A-13-24 22BBD	0.5	2.8	152	[illegible]	15	0.20	13	315	<0.100	<0.010
A-14-24 29DCC	0.6	3.8	145	[illegible]	23	0.30	11	383	<0.100	<0.010
A-14-25 14CCD	1	5.1	187	[illegible]	42	0.50	11	426	<0.100	<0.010

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT-I-FIER	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
AGUA FRIA BASIN										
A-09-02 27CBB1	0.06	--	11	42	<0.5	220	<1	<1	1	5
A-11-02 25BDD	0.03	--	1	93	<0.5	50	<1	<1	1	<1
A-12-01 26BAA3	--	--	1	100	<10	60	<1	<1	2	1
B-14-01 14ACC	0.03	--	--	--	--	20	--	--	--	--
B-14-01 23ADC		--	<1	50	<0.5	20	<1	<1	3	3
ALTAR VALLEY										
D-20-08 35BDB	--	--	--	--		110	--		--	--
ARAVAIPA VALLEY										
D-[illegible]-21 28BAD	0.06	--	2	[illegible]	[illegible]	40	<1	1	1	1
AVRA VALLEY										
D-15-11 [illegible]	--					90	--	--	--	--
BIG CHINO VALLEY										
B-21-[illegible]	--	--	[illegible]			140	--			--
B-22-[illegible]	--	[illegible]				[illegible]				--
B-2[illegible]	--	[illegible]		[illegible]		[illegible]				--
BIG SANDY VALLEY										
B-15-13 [illegible]	--	--	[illegible]	[illegible]		[illegible]	--		[illegible]	--
B-21-1[illegible] 2[illegible]	--	--	16	[illegible]	[illegible]	[illegible]	<1	<1	1	1
BLACK MESA										
[illegible]	--	--	[illegible]	[illegible]		[illegible]	--			--
[illegible]	--	--	--	--		[illegible]	--		[illegible]	--
[illegible]	0.22	--	--	[illegible]	--	[illegible]	--			--
[illegible]	0.02	--	--	[illegible]	--	[illegible]	--			--
[illegible]	0.03	--	--	--	--	[illegible]	--		--	--
[illegible] WELL NO.3	0.28	--	--	[illegible]		[illegible]	--	--		--
[illegible]	--	--	--	[illegible]		[illegible]	--		--	--
[illegible]	0.27	--	--	--	--	[illegible]	--			--
[illegible]	--	--	--			[illegible]	--			--
[illegible]	--	--	--			[illegible]	--		--	--
[illegible]	--	--	[illegible]			[illegible]	--	--	--	--
[illegible]	--	--	[illegible]			[illegible]	--	--	--	--
[illegible]						[illegible]	--		--	--
[illegible] VALLEY										
[illegible]	--	--	7	[illegible]	[illegible]	[illegible]	<1	[illegible]	[illegible]	3
[illegible]	--	--	--	--	--	[illegible]	--	--	--	--
[illegible]	--	--	3	[illegible]	[illegible]	[illegible]	<1	<1	<1	10
	--	--	--			[illegible]	--	--	--	--
BILL WILLIAMS										
B-1[illegible]	0.03		8	[illegible]	[illegible]	[illegible]	<1	<1	2	1
COLORADO RIVER, [illegible] DAM TO [illegible] DAM										
B-[illegible]	--	--	--	--	--	240	--	--	--	--
B-1[illegible]	--	--	1	72	<0.5	480	<1	2	2	2
B-16-22 [illegible]	--	--	2	49	<0.5	110	<1	<1	4	2
B-17-22 [illegible]	--	--	--	--	--	300	--	--	--	--
B-19-22 [illegible]	--	--	2	52	<0.5	130	<1	<1	2	5
B-2[illegible]-22 [illegible]	--	--	<1	100	<10	190	1	<1	<1	6
B-21-22 [illegible]	--	--	--	--	--	560	--	--	--	--
B-2[illegible] 21 21CBB	--	--	--	--	--	480	--	--	--	--
B-2[illegible] 17AAA	--	--	--	--	--	80	--	--	--	--
B-[illegible] 2[illegible] 01DBC2	--	--	--	--	--	490	--	--	--	--
[illegible]										
A-14-26 19ABA	0.18	--	--	--	--	10	--	--	--	--
A-13-24 [illegible]BD	--	--	--	--	--	20	--	--	--	--
A-14-24 [illegible]	--	--	--	--	--	40	--	--	--	--
A-1[illegible]-25 14CCD	--	--	--	--	--	60	--	--	--	--

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WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
AGUA FRIA BASIN									
A-09-02 27CBB1	7	<5	13	<1	7	--	300	2	8
A-11-02 25BDD	4	<5	28	<1	1	--	430	6	15
A-12-01 26BAA3	270	<5	<10	20	2	--	280	<1	100
B-14-01 14ACC	13	--	--	<1	--	--	--	--	--
B-14-01 23ADC	22	12	<4	71	1	--	240	<1	47
ALTAR VALLEY									
D-20-08 35BDB	7	--	--	<1	--	--	--	--	--
ARAVAIPA VALLEY									
D-08-21 20BAD	9	<5	22	2	1	--	320	10	5
AVRA VALLEY									
D-15-10 33DBC	6	--	--	<1	--	--	--	--	--
BIG CHINO VALLEY									
B-21-02 14BCC	8	--	--	2	--	--	--	--	--
B-22-07 08DDD	9	--	--	2	--	--	--	--	--
B-24-08 17DCD2	8	--	--	2	--	--	--	--	--
BIG SANDY VALLEY									
B-16-13 22CCC1	32	--	--	<1	--	--	--	--	--
B-21-14 24DAC	17	<5	48	<1	5	--	1400	3	37
BLACK MESA									
04-075-00.05X15.30	6	--	--	--	--	--	--	--	--
06 114-13.71X05.12	5	--	--	--	--	--	--	--	--
08 039-9.84X15.07	55	--	--	--	--	--	--	--	--
	14	--	--	--	--	--	--	--	--
17 092-05.36X16.81	5	--	--	--	--	--	--	--	--
6A-224 0802111921498	5	--	--	--	--	--	--	--	--
PEABODY WELL NO.9	22	--	--	--	--	--	--	--	--
04 056-07.11X04.13	4	--	--	--	--	--	--	--	--
04 056-06.11X01.15	8	--	--	--	--	--	--	--	--
04 056-08.80X05.85	6	--	--	--	--	--	--	--	--
04 056-09.00X03.73	5	--	--	--	--	--	--	--	--
08 039-06.68X17.11	5	--	--	--	--	--	--	--	--
08 039-09.44X17.18	3	--	--	--	--	--	--	--	--
BUTLER VALLEY									
B-07-15 02DDC	7	<5	23	2	13	--	620	30	<3
B-07-15 15AAD3	23	--	--	12	--	--	--	--	--
B-08-13 04DDD1	<3	<5	9	4	4	--	840	13	190
	7	--	--	2	--	--	--	--	--
BILL WILLIAMS									
B-11-16 27CCB2	4	<5	52	<1	7	--	930	10	5
COLORADO RIVER, HOOVER DAM TO IMPERIAL DAM									
B-04-19 29BCB	<3	--	--	7	--	--	--	--	--
B-14-20 33DCB	11	<5	120	2	6	--	1700	5	5
B-16-22 12BDD	470	<5	45	170	7	--	960	<1	57
B-17-22 11DCC	1000	--	--	1300	--	--	--	--	--
B-19-22 23CCC	62	<5	48	2	4	--	1500	3	<3
B-20-22 01DAD2	80	<5	80	<10	4	--	3600	5	<10
B-20-22 24DDC	40	--	--	10	--	--	--	--	--
B-21-21 21CBB	24	--	--	2	--	--	--	--	--
B-25-20 15AAA	21	--	--	1	--	--	--	--	--
B-09-20 01DBC2	7	--	--	3	--	--	--	--	--
CONCHO									
A-12-26 19ABA	9	--	--	4	--	--	--	--	--
A-13-24 22BBD	760	--	--	13	--	--	--	--	--
A-14-24 29DCC	1400	--	--	17	--	--	--	--	--
A-14-25 14CCD	690	--	--	16	--	--	--	--	--

< Actual value is known to be less than value shown

WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	STATION NUMBER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
DOUGLAS BASIN									
D-20-26 09DBB	314225109414001	03-30-88	348	8.10	24.5	51	19	0.74	47
D-20-26 25CBC	313941109390601	03-15-88	1190	7.40	22.0	500	140	36	52
D-23-27 16AAA	312610109354901	03-15-88	370	8.50	26.5	9	3.4	0.18	79
D-23-27 22DDD	312433109344901	03-30-88	390	8.50	24.0	14	4.4	0.66	68
D-24-24 07CDC	312058109322601	03-29-88	550	7.80	25.5	120	26	12	67
D-24-25 12ABB	312145109452401	03-29-88	560	7.50	21.0	200	57	15	22
DUNCAN BASIN									
19S 18W 20 111	323845108435001	03-16-88	355	7.70	22.0	120	29	12	25
19S 19W 29 323	323722108494001	03-18-88	430	7.80	23.0	58	19	2.6	73
19S 19W 32 333	323613108500301	03-18-88	440	9.00	23.0	3	1.2	0.09	98
3.20S.21W.17.111	323426109022201	03-18-88	435	8.50	22.0	15	3.9	1.2	98
D-06-30 01BAA	325655109135001	03-16-88	270	8.10	22.0	75	21	5.5	29
D-07-31 04BCA1	325124109105701	03-16-88	900	7.30	17.5	250	81	12	87
D-09-32 03AAA5	324108109025401	06-01-85	405	7.30	15.0	130	38	7.5	36
D-09-32 03BAA	324110109032201	03-18-88	570	7.20	17.0	110	31	8.9	85
GILA BEND BASIN									
C-05-04 31ADD	325700112415901	03-18-88	[illegible]	7.90	26.0	190	73	3.0	420
C-06-06 10BCB	325518112521101	03-15-88	1410	8.20	32.0	100	38	2.4	330
GILA RIVER FROM PAINTED ROCK DAM TO TEXAS HILL									
C-04-08 16AAB	330500113050201	07-11-88	3120	7.70	26.5	750	170	78	310
C-04-08 33ADD	330159113045001	07-11-88	2220	7.90	28.0	160	56	5.5	370
C-04-10 02CBB	330632113161401	07-12-88	1110	8.40	38.0	22	7.5	0.86	200
C-04-10 21BBB2	330402113181601	07-12-88	1150	8.60	29.0	12	4.2	0.25	220
C-04-11 02BBC	330648113222501	07-12-88	1680	8.20	39.0	130	46	2.5	280
C-04-11 08ABB	330607113245801	07-13-88	1120	7.60	38.5	110	40	2.4	170
C-04-11 29DBB	330305113250201	07-13-88	1042	8.00	31.0	--	--	--	--
		07-13-88	--	--	--	90	32	2.4	150
C-05-08 03ACD	330122113040401	07-11-88	2850	7.50	28.0	330	110	12	500
C-05-09 12CDA	330009113083101	07-14-88	2190	8.90	31.5	100	39	0.90	390
C-05-10 16CBC2	325927113181701	07-13-88	7020	7.60	32.0	620	190	33	1300
C-05-10 28DCB	325736113174601	07-12-88	1340	8.20	39.0	62	22	1.6	250
C-05-11 15ACC	325938113225201	07-14-88	2750	8.00	34.0	260	96	5.6	490
C-05-12 16BBB	325959113303401	07-13-88	1920	7.70	32.0	--	--	--	--
		07-13-88	--	--	--	250	83	9.7	280
C-06-09 32CCB	325129113124001	07-12-88	1220	8.30	38.0	62	22	1.7	210
C-06-12 19ADB	325338113313901	07-14-88	14000	7.30	23.0	2900	650	300	2200
C-06-13 03ABB	325632113345801	07-14-88	930	8.10	33.5	39	13	1.6	160
C-07-11 36DDD	324604113200401	07-11-88	1310	8.00	35.0	54	20	0.96	230
C-07-12 13DCD	324841113263601	07-15-88	1740	8.20	34.5	97	35	1.6	300
C-07-12 21BDC2	324819113300201	07-14-88	2250	7.80	30.5	180	66	2.7	380
C-07-13 24ADA	324825113322801	07-14-88	2420	7.90	32.0	140	43	6.7	430
C-11-06 10BAA3	322922112522501	07-25-88	552	7.40	26.5	260	78	16	11
C-11-06 24BDA	322726112502001	07-25-88	928	7.90	41.0	49	14	3.3	160
C-12-04 21DAC	322155112404701	07-25-88	575	7.50	25.5	160	38	16	64
GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN									
A-01-16 19BAB	332507110425001	07-13-88	515	7.60	30.0	220	39	29	23
A-01-18 17ACB	332554110291301	08-18-88	588	7.40	22.5	260	63	24	37
A-01-18 28CAD	332355110281501	08-18-86	402	7.90	25.0	110	23	13	48
A-02-17 34BBA	332842110334801	08-16-88	560	7.60	22.5	270	62	28	24
D-01-17 10ABB	332159110353901	08-15-88	460	8.10	23.0	94	16	13	70
D-01-17 21DDD	331932110361902	08-17-88	370	7.80	26.0	160	47	9.5	20
D-01-18 12DCD2	332117110271501	09-01-88	699	7.65	22.5	130	30	14	110
D-01-18 25DAB1	331857110270901	08-25-88	695	7.50	25.0	--	--	--	--
		08-25-88	695	7.50	25.0	190	48	17	77
D-01-18 36DDD	331744110265801	08-17-88	752	7.60	21.0	230	56	22	73
D-01-19 30CDB	331844110263801	08-15-88	750	7.70	20.0	220	53	21	79
D-02-18 21CBC	331433110305801	08-30-88	419	7.70	25.5	180	49	13	21
D-02-20 11ABB	331646110155201	08-29-88	450	7.60	24.5	200	53	17	20
D-03-18 05CDC	331140110314601	08-19-88	640	7.50	24.0	190	51	16	73
D-03-19 11CAC	331103110222601	08-30-88	639	9.00	--	10	2.5	0.94	140

WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
DOUGLAS BASIN										
D-20-26 09DBB	3	1.5	105	[illegible]	[illegible]	2.4	28	202	1.10	<0.010
D-20-28 25CBC	1	4.4	253	[illegible]	[illegible]	1.1	39	799	13.0	<0.010
D-23-27 16AAA	12	0.90	140	[illegible]	11	0.40	24	236	1.60	<0.010
D-23-27 22DDD	8	0.90	144	[illegible]	[illegible]	0.60	18	215	1.40	<0.010
D-24-24 07CDC	3	3.5	188	45	22	0.60	22	316	1.40	<0.010
DUNCAN BASIN										
D-24-25 12ABB	0.7	2.3	[illegible]	12	[illegible]	0.40	26	286	5.40	<0.010
19S 18W 20 111	1	3.1	174	12	[illegible]	0.73	23	219	5.40	<0.010
19S 19W 29 323	4	4.9	185	17	10	0.80	24	262	<0.100	<0.010
19S 19W 32 333	24	0.30	183	[illegible]	[illegible]	0.40	17	259	1.30	0.020
3.20S.21W.17.111	12	0.80	176	14	8.8	1.5	40	296	4.90	0.020
D-06-30 01BAA	2	2.1	112	13	[illegible]	[illegible]	25	173	0.830	<0.010
D-07-31 04BCA1	2	3.3	202	120	[illegible]	1.9	40	549	2.40	0.020
D-09-32 03AAA5	1	2.0	148	[illegible]	11	1.9	30	251	0.170	0.060
D-09-32 03BAA	4	2.0	275	[illegible]	15	2.8	44	374	0.620	0.050
GILA BEND BASIN										
C-05-04 31ADD	14	8.3	[illegible]	[illegible]	[illegible]	2.8	27	1360	2.50	<0.010
C-06-06 10BCB	15	4.0	[illegible]	[illegible]	[illegible]	4.0	33	989	2.60	<0.010
GILA RIVER FROM PAINTED ROCK DAM TO TEXAS HILL										
C-04-08 16AAB	5	6.0	[illegible]	[illegible]	[illegible]	[illegible]	25	1590	11.0	<0.010
C-04-08 33ADD	13	3.0	[illegible]	[illegible]	[illegible]	[illegible]	33	1250	0.950	<0.010
C-04-10 02CBB	19	1.7	84	[illegible]	[illegible]	[illegible]	22	559	2.00	<0.010
C-04-10 21BBB2	30	2.1	[illegible]	[illegible]	[illegible]	3.1	44	661	2.50	<0.010
C-04-11 02BBC	11	4.4	[illegible]	[illegible]	[illegible]	4.7	43	349	5.40	<0.010
C-04-11 08ABB	7	5.9	[illegible]	[illegible]	[illegible]	3.2	46	631	3.60	<0.010
C-04-11 29DBB	--	--	[illegible]	--	--	--	--	--	--	--
	8	4.0	[illegible]	[illegible]	[illegible]	3.8	13	575	4.50	<0.010
C-05-08 03ACD	13	3.9	[illegible]	[illegible]	[illegible]	3.9	42	1710	4.20	<0.010
C-05-09 12CDA	18	1.2	[illegible]	[illegible]	[illegible]	4.2	17	1210	0.010	<0.010
C-05-10 16CBC2	24	[illegible]	[illegible]	[illegible]	[illegible]	3.5	52	4680	26.0	<0.010
C-05-10 28DCB	15	[illegible]	[illegible]	[illegible]	[illegible]	5.7	33	794	1.60	<0.010
C-05-11 15ACC	14	7.6	[illegible]	[illegible]	[illegible]	3.5	51	1730	22.0	<0.010
C-05-12 16BBB	--	--	[illegible]	--	--	--	--	--	--	--
	8	[illegible]	[illegible]	[illegible]	[illegible]	2.2	33	1120	[illegible]	<0.010
C-06-09 32CCB	12	2.5	[illegible]	[illegible]	[illegible]	6.4	41	674	[illegible]	<0.010
C-06-12 19ADB	18	3.0	287	[illegible]	[illegible]	3.0	32	[illegible]	[illegible]	<0.010
C-06-13 03ABB	12	4.2	[illegible]	[illegible]	[illegible]	3.7	38	521	3.10	<0.010
C-07-11 36DDD	14	2.6	[illegible]	[illegible]	[illegible]	3.1	42	730	1.90	<0.010
C-07-12 13DCD	14	2.7	[illegible]	[illegible]	412	5.8	26	1020	[illegible]	<0.010
C-07-12 21BDC2	13	4.5	[illegible]	[illegible]	410	5.8	32	1280	1.70	<0.010
C-07-13 24ADA	17	1.0	[illegible]	[illegible]	[illegible]	4.1	21	1290	2.10	<0.010
C-11-06 10BAA3	0.3	3.4	250	[illegible]	[illegible]	0.50	46	254	3.10	<0.010
C-11-08 24BDA	10	3.6	[illegible]	[illegible]	[illegible]	4.9	44	532	0.180	0.020
C-12-04 21DAC	2	2.9	287	[illegible]	4.8	0.10	54	365	1.90	0.010
GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN										
A-01-16 10BAB	0.7	2.2	[illegible]	[illegible]	15	0.20	32	294	1.20	<0.010
A-01-18 17ACB	1	1.4	[illegible]	[illegible]	13	0.40	31	367	0.630	0.020
A-01-18 28CAD	2	2.8	[illegible]	11	12	0.20	16	254	0.860	<0.010
A-02-17 34BBA	0.7	1.8	[illegible]	22	12	0.30	31	350	1.20	<0.010
D-01-17 10ABB	3	2.7	[illegible]	15	23	0.40	20	253	1.10	<0.010
D-01-17 21DDD	0.7	1.8	[illegible]	7.5	23	0.30	32	242	5.10	<0.010
D-01-18 12DCD2	4	1.1	--	18	26	1.0	33	424	2.10	0.160
D-01-18 25DAB1	--	--	--	--	--	--	--	--	--	--
	3	2.5	[illegible]	61	37	0.40	28	423	2.60	0.030
D-01-18 36DDD	2	3.4	[illegible]	55	77	0.40	33	449	0.330	0.070
D-01-19 30CDB	2	2.7	[illegible]	39	69	0.40	35	453	0.910	0.060
D-02-18 21CBC	0.7	2.3	--	7.0	15	0.40	31	267	7.80	0.010
D-02-20 11ABB	0.6	4.6	[illegible]	11	11	0.20	56	317	2.70	0.020
D-03-18 05CDC	2	3.7	[illegible]	33	18	0.20	39	417	3.20	<0.010
D-03-19 11CAC	20	1.7	--	84	10	2.9	13	384	<0.100	0.030

< Actual value is known to be less than value shown.

LOCAL IDENT- I- FIER	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, HEXA- VALENT, DIS. (UG/L AS CR) (01032)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
DOUGLAS BASIN										
D-20-26 09DBB	--	--	4	26	<0.5	60	<1	3	<1	14
D-20-26 25CBC	--	--	--	--	--	70	--	--	--	--
D-23-27 16AAA	--	--	2	6	<0.5	90	<1	<1	1	4
D-23-27 22DDD	--	--	8	16	<0.5	120	<1	<1	<1	31
D-24-24 07CDC	--	--	3	84	<0.5	110	<1	<1	1	10
D-24-25 12ABB	--	--	2	230	<0.5	70	<1	<1	<1	10
DUNCAN BASIN										
19S 18W 20 111	--	--	--	--	--	40	--	--	--	--
19S 19W 29 323	--	--	--	--	--	120	--	--	--	--
19S 19W 32 333	0.06	--	14	<2	<0.5	100	<1	<1	1	15
3.20S.21W.17 111	0.08	--	--	--	--	170	--	--	--	--
D-06-30 01BAA	--	--	--	--	--	30	--	--	--	--
D-07-31 04BCA1	0.06	--	--	--	--	110	--	--	--	--
D-09-32 03AAA5	0.18	--	--	--	--	50	--	--	--	--
D-09-32 03BAA	0.15	--	--	--	--	120	--	--	--	--
GILA BEND BASIN										
C-05-04 31ADD	--	--	--	--	--	1100	--	--	--	--
C-06-06 10BCB	--	--	--	--	--	1400	--	--	--	--
GILA RIVER FROM PAINTED ROCK DAM TO TEXAS HILL										
C-04-08 16AAB	--	--	[illegible]	[illegible]	[illegible]	300	<1	<1	1	<1
C-04-08 33ADD	--	[illegible]	16	[illegible]	[illegible]	1100	2	<1	<1	<1
C-04-10 02CBB	--	[illegible]	54	3	<0.5	1100	1	2	1	<1
C-04-10 21BBB2	--	[illegible]	49	<2	<0.5	950	<1	1	<1	<1
C-04-11 02BBC	--	[illegible]	61	16	<0.5	850	<1	2	1	<1
C-04-11 08ABB	--	--	45	33	<0.5	410	<1	<1	<1	1
C-04-11 29DBB	--	--	--	--	--	--	--	--	--	--
	--	--	50	[illegible]	<0.5	380	<1	1	<1	1
C-05-08 03ACD	--	[illegible]	10	<100	<10	2000	<1	<1	1	<1
C-05-09 12CDA	--	[illegible]	21	<100	<10	1900	<1	<1	1	<1
C-05-10 16CBC2	--	[illegible]	[illegible]	200	<10	5700	<1	2	1	1
C-05-10 28DCB	--	[illegible]	[illegible]	[illegible]	<0.5	2000	<1	<1	<1	1
C-05-11 15ACC	--	[illegible]	[illegible]	<100	<10	1300	2	1	<1	<1
C-05-12 16BBB	--	--	--	--	--	--	--	--	--	--
	--	--	[illegible]	25	<0.5	880	1	3	<1	<1
C-06-09 32CCB	--	--	34	2	<0.5	1800	2	<1	<1	1
C-06-12 19ADB	--	[illegible]	[illegible]	20	<10	4000	1	<1	2	1
C-06-13 03ABB	--	[illegible]	23	47	<0.5	440	1	2	<1	<1
C-07-11 36DDD	--	[illegible]	12	11	<0.5	1500	<1	<1	1	1
C-07-12 13DCD	--	[illegible]	[illegible]	44	<0.5	1900	<1	<1	<1	1
C-07-12 21BDC2	--	[illegible]	[illegible]	<1	<10	1500	1	[illegible]	1	4
C-07-11 24ADA	--	[illegible]	13	<100	<10	1300	1	[illegible]	<1	6
C-11-06 10BAA	--	[illegible]	[illegible]	100	<0.5	40	<1	<1	2	1
C-11-06 24BDA	0.06	[illegible]	43	<2	<0.5	440	<1	<1	2	1
C-12-04 21DAC	0.03	[illegible]	4	74	<0.5	140	<1	<1	2	1
GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN										
A-01-16 19BAB	--	--	--	--	--	30	--	--	--	--
A-01-18 17ACB	0.06	<10	16	47	--	40	<1	<1	--	--
A-01-18 28CAD	--	<10	5	56	--	40	<1	<1	--	--
A-02-17 34BBA	--	<10	<1	22	--	30	<1	<1	--	--
D-01-17 10ABB	--	<10	9	51	--	110	<1	1	--	--
D-01-17 21DDD	--	<10	<1	9	--	20	1	1	--	--
D-01-18 12DCD2	0.40	<10	70	40	--	220	1	3	--	--
D-01-18 25DAB1	--	--	--	--	--	--	--	--	--	--
	0.09	<10	5	62	--	140	<1	2	--	--
D-01-18 36DDD	0.21	<10	8	63	--	60	<1	1	--	--
D-01-19 30CDB	0.18	<10	9	43	--	90	<1	<1	--	--
D-02-18 21CBC	0.03	<10	2	48	--	30	2	1	--	--
D-02-20 11ABB	0.06	<10	3	3	--	30	2	<1	--	--
D-03-18 05CDC	--	<10	7	6	--	70	<1	<1	--	--
D-03-19 11CAC	0.09	10	250	32	--	220	<1	1	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
DOUGLAS BASIN									
D-20-26 09DBB	<3	<5	84	<1	3	--	160	5	<3
D-20-26 25CBC	7			15	--		--	--	--
D-23-27 16AAA	<3	<5	23	<1	4		34	7	<3
D-23-27 22DDD	4	<5	52	1	6		130	29	11
D-24-24 07CDC	4	<5	66	1	3		1000	8	5
D-24-25 12ABB	14	<5	33	4	2		480	4	20
DUNCAN BASIN									
10S 18W 20 111	13			1			--		--
10S 19W 29 323	36	--		--			--	--	--
10S 19W 32 333	200	<5	75	4	1		18	81	22
3 20S 21W 17 111	13			<1			--	--	--
D-06-30 01BAA	11			2			--	--	--
D-07-31 04BCA1	3			<1			--	--	--
D-09-32 03AAA5	11			7				--	--
D-09-32 03BAA	<3			4				--	--
GILA BEND BASIN									
C-03-04 31ACD	[illegible]			<1					--
C-06-06 10BCB	[illegible]			[illegible]					--
GILA RIVER FROM PAINTED ROCK DAM TO TEXAS HILL									
C-04-08 16AAB	[illegible]	<5	[illegible]	<1	[illegible]		1300	30	<10
C-04-08 33ACD	20	<5	[illegible]	<1	10		670	19	<10
C-04-10 02CBB	12	<5	14	1	[illegible]		140	57	<3
C-04-10 21BBB2	5	<5	[illegible]	<1	[illegible]		43	65	3
C-04-11 02BBC	11	<5	24	<1	10		340	29	<3
C-04-11 08ABB	8	<5	17	<1	13		350	25	<3
C-04-11 20CBB							--	--	--
	11	<5	[illegible]	[illegible]	[illegible]		220	30	3
C-05-08 33ACD	20	<5	[illegible]	<1	14	--	1300	20	<10
C-05-09 12CDA	40	<5	[illegible]	<1	[illegible]		80	35	<10
C-05-10 16CBC2	4	<5	40	1	[illegible]		4300	35	<10
C-05-10 24CCB	11	<5	[illegible]	<1	4		550	23	13
C-05-11 15ACC	40	<5	[illegible]	<1	14		710	20	<10
C-05-12 16BBB							--	--	--
	15	<5	[illegible]	<1	6		540	12	4
C-06-09 32CCB	<3	<5	[illegible]	[illegible]	34		420	16	17
C-06-12 19ACB	<3	<5	[illegible]	[illegible]	9		7300	30	10
C-06-13 03ABB	6	<5	16	1	[illegible]		100	30	<3
C-07-11 36CCC	16	<5	[illegible]	<1	34	--	400	13	8
C-07-12 13CCC	9	<5	[illegible]	<1	20	--	790	17	<3
C-07-12 21BCC2	[illegible]	<5	[illegible]	<10	[illegible]	[illegible]	1300	12	180
C-07-13 24ACA	[illegible]	<5	20	<1	[illegible]		2300	22	20
C-11-09 12BAA3	70	<5	[illegible]	12	1		500	4	100
C-11-06 24BDA	[illegible]	6	11	<1	[illegible]		170	23	<3
C-10-04 21DAC	[illegible]	<5	14	7	[illegible]		410	31	33
GILA RIVER FROM HEAD OF SAN CARLOS RESERVOIR TO KELVIN									
A-01-18 14BAB	8			1		--	--	--	--
A-01-18 17ACB	17	<5	23	1		<1	300	--	--
A-01-18 28CAD	4	<5	52	<1		2	320	--	--
A-02-17 34BBA	20	<5	14	3		<1	350	--	--
D-01-17 10ABB	7	7	42	<1		<1	330	--	--
D-01-17 21DDD	38	<5	41	7		<1	180	--	
D-01-18 12DCD2	5	<5	52	<1		2	250	--	--
D-01-18 25DAB1	--	--	--	--	--		--	--	--
	15	<5	35	<1	--	<1	570	--	--
D-01-18 36DD3	10	<5	44	190	--	<1	380	--	--
D-01-19 30CDB	7	<5	40	<1	--	<1	380	--	--
D-02-18 21CBC	28	<5	41	6	--	<1	190	--	--
D-02-20 11ABB	30	<5	19	4	--	<1	250	--	--
D-03-18 05CDD	9	<5	71	<1	--	<1	270	--	--
D-03-19 11CAC	27	<5	110	2	--	<1	80	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT-I-FIER	STATION NUMBER	DATE	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
GILA RIVER FROM TEXAS HILL TO DOME									
C-07-15 24CBA	324811113453801	07-12-88	[illegible]	[illegible]	22.5	950	230	91	530
C-07-15 26DDD	324657113455201	07-14-88	[illegible]	[illegible]	25.0	1300	370	97	2100
C-08-15 06BBB	324557113504601	07-13-88	[illegible]	[illegible]	22.5	910	230	80	380
C-08-16 02AAA	324557113520301	07-12-88	[illegible]	7.30	22.0	910	230	81	310
C-08-16 05BBB	324556113560401	07-12-88	[illegible]	[illegible]	23.0	1200	290	120	610
C-08-16 18DCC	324325113563401	07-12-88	[illegible]	[illegible]	23.5	280	59	32	550
C-08-17 03DDD	324506113591601	07-13-88	[illegible]	[illegible]	[illegible]	34	[illegible]	2.6	310
C-08-17 09CCC	324414114011601	07-11-88	[illegible]	[illegible]	[illegible]	1300	220	110	930
C-08-17 12AAA	324503113571501	07-13-88	[illegible]	[illegible]	22.5	750	150	75	390
C-08-17 14DCC	324324113584201	07-13-88	[illegible]	[illegible]	23.5	900	220	84	580
C-08-18 20CBB	324251114083001	07-12-88	[illegible]	[illegible]	22.0	670	120	90	1500
C-08-18 25BAA	324225114035501	07-11-88	[illegible]	[illegible]	23.5	810	150	81	420
C-08-18 29DDC	324135114073901	07-12-88	[illegible]	[illegible]	[illegible]	1200	320	95	640
C-08-18 34ACC	324111114055101	07-11-88	[illegible]	[illegible]	23.5	440	97	47	590
C-08-20 08BCB	324448114194601	07-13-88	[illegible]	[illegible]	23.5	1700	460	140	900
C-08-20 15BCD2	324344114193201	07-14-88	[illegible]	[illegible]	23.5	1000	250	99	730
C-09-19 02AAA	324040114193201	07-12-88	[illegible]	[illegible]	[illegible]	530	130	63	750
C-09-19 04BBB	324040114133501	07-12-88	[illegible]	[illegible]	[illegible]	700	150	71	840
C-09-19 17AAC	[illegible]	07-15-88	[illegible]	[illegible]	24.5	300	79	25	590
C-12-06 35DCA	322003112511301	07-26-88	[illegible]	[illegible]	28.5	410	65	60	150
C-12-08 17ADA	322308113060801	07-26-88	[illegible]	[illegible]	26.5	310	69	34	780
C-13-05 25CBD	321545112442021	07-26-88	[illegible]	[illegible]	33.5	110	34	7.4	150
C-14-07 35AAD2	321010112465501	[illegible]	[illegible]	[illegible]	26.5	280	91	13	9.6
HARQUAHALA BASIN									
B-05-09S02BBD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	200	46	20	72
C-01-09 05CCC	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	77	[illegible]	[illegible]	170
HASSAYAMPA BASIN									
B-07-05 01CDB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	200	52	17	29
HUALAPAI VALLEY									
B-22-16 28BDA2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
B-23-13 20CCD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	37	41
B-24-12 09AAD	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	34	13
B-26-18 03AAA1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	24	35
B-28-17 23CCB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	14	[illegible]	42
LOWER HASSAYAMPA									
B-02-06 23DAA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	280	[illegible]	12	280
LITTLE CHINO VALLEY									
B-16-02 03DDC4	344723112265701	03-07-88	[illegible]	[illegible]	[illegible]	270	62	28	44
B-17-02S34ABB	344825112272701	03-07-88	325	[illegible]	[illegible]	120	[illegible]	9.3	14
LOWER SANTA CRUZ BASIN									
D-04-09 04DDD	330618111251401	03-10-88	[illegible]	[illegible]	[illegible]	270	80	19	120
D-05-03 16CCC2	[illegible]	03-17-88	[illegible]	[illegible]	23.0	44	17	4.8	99
D-05-07 23DDA	325813111360401	03-16-88	[illegible]	[illegible]	[illegible]	680	200	43	590
D-06-03 22DCC	325250112012601	03-22-88	[illegible]	[illegible]	26.0				--
D-06-04N04ABB	325627111500601	03-07-88	[illegible]	[illegible]	28.5	140	46	6.3	83
D-06-04S04DDD3	325523111554301	03-17-88	[illegible]	[illegible]	25.0	380	120	19	110
D-06-07 15ADC2	325407111361501	03-08-88	[illegible]	[illegible]	33.5	[illegible]	4.1	<0.01	220
D-07-04W01DAD	325041111534201	03-07-88	[illegible]	[illegible]	[illegible]	23	6.2	1.9	170
D-07-06 29DDD2	324645111442301	03-07-88	[illegible]	[illegible]	24.5	960	300	50	260
D-07-06 34CDD1	324550111425301	03-07-88	[illegible]	[illegible]	27.5	210	69	10	120
D-09-07 02CDD	323954111353101	[illegible]	[illegible]	[illegible]	[illegible]	280	92	14	81
D-09-07 03ADD	324007111361001	[illegible]	[illegible]	7.70	[illegible]	150	48	8.2	61
D-10-09 10AAD2	323413111235101	03-08-88	[illegible]	7.70	[illegible]	190	64	8.2	71
D-10-10 05DAD	323438111104501	03-16-88	475	[illegible]	27.5	140	46	5.6	45
D-10-10 05DBA	323450111105801	03-16-88	635	[illegible]	27.0	220	68	12	54
D-11-11 35DDD	322530111110001	03-21-88	870	7.00	24.0	340	110	17	60
LOWER VERDE RIVER									
A-03-08 15ABA	333639111433101	03-01-88	640	7.50	[illegible]	200	59	14	50
MCMULLEN VALLEY									
B-05-13 11CBB	334725113352001	03-08-88	1060	8.10	32.0	52	18	1.5	200
B-07-09 11AAA	335815113093001	03-07-88	495	7.90	29.5	98	21	11	69

WATER-QUALITY DATA--Continued

LOCAL IDENT-I-FIER	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
GILA RIVER FROM TEXAS HILL TO DOME										
C-07-15 24CBA	8	8.5	[illegible]	[illegible]	[illegible]	0.70	27	2530	1.50	0.030
C-07-15 26DDD	26	9.8	282	1400	[illegible]	3.8	41	6710	2.40	<0.010
C-08-15 06BBB	6	9.4	306	[illegible]	420	0.80	22	2160	2.50	0.020
C-08-16 02AAA	5	8.6	394	720	[illegible]	[illegible]	25	1960	2.70	0.020
C-08-16 05BBB	10	10	448	1100	860	0.70	27	3500	2.00	<0.010
C-08-16 18DCC	15	4.0	370	[illegible]	270	1.8	34	1900	6.80	0.010
C-08-17 03DDD	24	2.0	126	250	270	6.2	13	903	0.700	<0.010
C-08-17 09CCC	13	8.6	551	1200	[illegible]	1.8	32	3780	0.380	0.030
C-08-17 12AAA	6	8.6	413	750	[illegible]	0.70	24	2110	1.30	0.020
C-08-17 14DCC	9	8.2	396	[illegible]	[illegible]	5.1	29	2650	<0.100	<0.010
C-08-18 20CBB	20	10	374	[illegible]	[illegible]	3.4	33	4890	0.350	0.030
C-08-18 25BAA	7	8.5	[illegible]	[illegible]	[illegible]	0.70	27	2170	1.40	0.010
C-08-18 29DDC	8	8.1	[illegible]	[illegible]	[illegible]	4.3	27	2990	5.40	<0.010
C-08-18 34ACC	13	5.7	[illegible]	[illegible]	[illegible]	2.5	33	2220	7.90	0.040
C-08-20 09BCB	10	9.2	[illegible]	[illegible]	[illegible]	[illegible]	31	4240	<0.100	0.020
C-08-20 15BCD2	10	[illegible]	[illegible]	[illegible]	[illegible]	0.70	32	3200	0.140	0.030
C-09-19 02AAA	14	[illegible]	[illegible]	[illegible]	[illegible]	3.2	30	2850	3.40	0.020
C-09-19 04BBB	14	[illegible]	[illegible]	[illegible]	[illegible]	2.3	32	3150	0.170	0.020
C-09-19 13AAC	15	4.6	271	[illegible]	[illegible]	4.5	24	2100	[illegible]	<0.010
C-12-06 35DCA	3	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	60	845	1.70	0.010
C-12-08 17ADA	20	24	[illegible]	[illegible]	[illegible]	1.4	--	[illegible]	0.160	0.240
C-13-05 25CBD	7	6.4	[illegible]	[illegible]	[illegible]	2.8	55	594	4.00	0.020
C-14-07 35AAD2	2.3	2.2	[illegible]	[illegible]	[illegible]	0.30	43	350	1.60	0.020
HARQUAHALA BASIN										
B-05-[illegible]	2	2.8	144	[illegible]	[illegible]	[illegible]	21	425	13.0	0.010
C-01-03 05CCC	8	4.1	[illegible]	[illegible]	[illegible]	3.5	1000	1550	3.40	<0.010
HASSAYAMPA BASIN										
B-07-05 01CDB	0.8	2.8	194	[illegible]	[illegible]	<0.10	25	302	0.730	0.040
HUALAPAI VALLEY										
B-22-16 28BDA2	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	54	276	2.60	<0.010
B-23-13 20CCD	1	3.2	[illegible]	[illegible]	[illegible]	[illegible]	62	469	1.50	0.030
B-24-12 29AAD	0.5	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	33	315	4.30	0.020
B-28-18 03AAA1	1	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	41	294	3.90	<0.010
B-29-17 23CCB	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	22	233	4.00	<0.010
LOWER HASSAYAMPA										
B-02-08 20DAA	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	20	1100	18.0	<0.010
LITTLE CHINO VALLEY										
B-16-02 [illegible]	1	4.4	[illegible]	[illegible]	[illegible]	[illegible]	34	419	6.00	<0.010
B-17-02 [illegible]ABB	0.6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30	190	1.00	<0.010
LOWER SANTA CRUZ BASIN										
D-04-09 04DDD	3	4.5	[illegible]	[illegible]	[illegible]	[illegible]	31	681	2.60	<0.010
D-05-03 16CCC2	7	2.2	[illegible]	[illegible]	[illegible]	3.2	18	338	2.00	<0.010
D-05-07 28DDA	10	7.3	[illegible]	[illegible]	[illegible]	0.70	34	2650	15.0	<0.010
D-06-03 22DCC	--	--	422	--	--	--	--	--	--	--
D-06-04N04ABB	3	3.2	[illegible]	[illegible]	[illegible]	0.30	25	397	2.20	<0.010
D-06-04S04DDD3	3	3.2	[illegible]	[illegible]	[illegible]	0.40	32	813	13.0	<0.010
D-06-07 15ADC2	--	1.4	76	[illegible]	[illegible]	2.8	34	--	1.30	<0.010
D-07-04W01DAD	10	1.4	[illegible]	[illegible]	[illegible]	1.7	26	314	2.00	<0.010
D-07-06 28DDD2	4	[illegible]	[illegible]	[illegible]	[illegible]	0.20	45	2000	28.0	<0.010
D-07-06 34CDD1	4	[illegible]	[illegible]	[illegible]	[illegible]	0.70	34	686	10.0	<0.010
D-09-07 02CDD	2	[illegible]	[illegible]	[illegible]	[illegible]	0.40	32	593	24.0	0.010
D-09-07 03ADD	2	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	30	363	8.20	<0.010
D-10-09 10AAD2	2	2.7	[illegible]	[illegible]	[illegible]	[illegible]	34	421	6.60	<0.010
D-10-10 05DAD	2	2.5	[illegible]	[illegible]	[illegible]	[illegible]	32	300	1.70	<0.010
D-10-10 05DBA	2	2.7	[illegible]	[illegible]	[illegible]	[illegible]	30	444	3.30	<0.010
D-11-11 35DDD	1	2.8	[illegible]	[illegible]	[illegible]	0.40	35	602	9.70	<0.010
LOWER VERDE RIVER										
A-03-06 15ABA	2	2.7	[illegible]	[illegible]	84	1.5	45	381	1.20	<0.010
MCMULLEN VALLEY										
B-05-13 11CBB	13	3.4	98	52	[illegible]	1.8	19	[illegible]	12.0	<0.010
B-07-03 11AAA	3	3.3	141	26	36	2.8	29	296	3.10	<0.010

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT-I-FIER	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
GILA RIVER FROM TEXAS HILL TO DOME										
C-07-15 24CBA	0.09	--	6	200	<10	660	1	<1	1	1
C-07-15 26DDD	--	--	11	<100	<10	6500	1	<1	2	2
C-08-15 06BBB	0.06	--	5	<100	<10	500	1	<1	<1	4
C-08-16 02AAA	0.06	--	10	<100	<10	430	1	<1	1	2
C-08-16 05BBB	--	--	15	<100	<10	940	1	2	<1	1
C-08-16 18DCC	0.03	--	6	<100	<10	850	1	<1	<1	9
C-08-17 03DDD	--	--	63	23	<0.5	890	<1	<1	<1	1
C-08-17 09CCC	0.09	--	10	200	<10	1400	<1	1	1	8
C-08-17 12AAA	0.06	--	5	<100	<10	530	1	<1	<1	1
C-08-17 14DCC	--	--	15	100	<10	850	1	2	1	<1
C-08-18 20CBB	0.09	--	14	100	<10	2800	<1	<1	<1	3
C-08-18 25BAA	0.03	--	24	<100	<10	520	<1	1	1	2
C-08-18 29DDC	--	--	[illegible]	<100	<10	1200	<1	2	1	2
C-08-18 34ACC	0.12	--	30	[illegible]	<10	1100	<1	2	2	3
C-08-20 09BCB	0.06	--	17	[illegible]	<10	1000	<1	1	1	1
C-08-20 15BCD2	0.09	--	13	[illegible]	<10	1000	<1	1	1	<1
C-09-19 02AAA	0.20	--	17	[illegible]	<10	1600	<1	<1	<1	1
C-09-19 04BBB	0.06	--	30	[illegible]	<10	1300	<1	1	1	1
C-09-19 13AAC	--	--	13	<100	<10	2000	<1	1	1	1
C-12-06 35DCA	0.03	--	8	96	<0.5	450	<1	<1	1	30
C-12-08 17ADA	0.74	--	2	<100	<10	2400	<1	<1	<1	<1
C-13-05 25CBD	0.06	--	140	3	<0.5	380	<1	1	<1	3
C-14-07 35AAD2	0.08	--	2	100	<0.5	50	<1	<1	1	1
HARQUAHALA BASIN										
B-05-09S02BBD	0.03	--	--	--	--	120	--	--	--	--
C-01-09 05CCC	--	--	--	--	--	470	--	--	--	--
HASSAYAMPA BASIN										
B-07-05 01CDB	0.12	--	3	34	<0.5	80	<1	1	1	1
HUALAPAI VALLEY										
B-22-16 26BDA2	--	--	--	--	--	100	--	22	--	--
B-23-13 20CCD	0.09	--	13	61	<0.5	150	1	4	<1	15
B-24-12 08AAD	0.06	--	7	5	<0.5	80	1	24	<1	7
B-26-18 03AAA1	--	--	--	--	--	140	--	16	--	--
B-29-17 23CCB	--	--	--	--	--	210	--	--	--	--
LOWER HASSAYAMPA										
B-02-06 20DAA	--	--	--	--		1400	--	--	--	--
LITTLE CHINO VALLEY										
B-16-02 03DDC4	--	--	--	--	--	170	--	--	--	--
B-17-02S34ABB	--	--	--	--	--	30	--	--	--	--
LOWER SANTA CRUZ BASIN										
D-04-09 04DDD	--	--	--	--	--	120	--	--	--	--
D-05-03 16CCC2	--	--	--	--	--	200	--	--	--	--
D-05-07 23DDA	--	--	--	--	--	1300	--	--	--	--
D-06-03 22DCC	--	--	--	--	--	--	--	--	--	--
D-06-04N04ABB	--	--	--	--	--	110	--	--	--	--
D-06-04S04DDD3	--	--	--	--	--	190	--	--	--	--
D-06-07 15ADC2	--	--	--	--	--	510	--	--	--	--
D-07-04W01DAD	--	--	--	--	--	210	--	--	--	--
D-07-06 29DDD2	--	--	--	--	--	1100	--	--	--	--
D-07-06 34CDD1	--	--	--	--	--	190	--	--	--	--
D-09-07 02CDD	0.03	--	--	--	--	90	--	--	--	--
D-09-07 03ADD	--	--	--	--	--	90	--	--	--	--
D-10-09 10AAD2	--	--	--	--	--	90	--	--	--	--
D-10-10 05DAD	--	--	--	--	--	60	--	--	--	--
D-10-10 05DBA	--	--	--	--	--	120	--	--	--	--
D-11-11 35DDD	--	--	--	--	--	60	--	--	--	--
LOWER VERDE RIVER										
A-03-06 15ABA	--	--	--	--	--	90	--	--	--	--
MCMULLEN VALLEY										
B-05-13 11CBB	--	--	5	230	<0.5	230	2	2	<1	4
B-07-09 11AAA	--	--	--	--	--	160	--	--	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
GILA RIVER FROM TEXAS HILL TO DOME									
C-07-15 24CBA	220	<5	220	1400	9	--	2100	5	<10
C-07-15 26DDD	30	<5	750	270	230	--	5000	37	<10
C-08-15 06BBB	20	<5	210	[illegible]	9	--	2200	8	<10
C-08-16 02AAA	150	<5	200	[illegible]	7	--	1900	5	<10
C-08-16 05BBB	280	<5	[illegible]	3100	8	--	2700	14	20
C-08-16 18DCC	10	<5	210	<10	14	--	1100	29	10
C-08-17 03DDD	49	<5	170	10	22	--	230	68	<3
C-08-17 09CCC	100	<5	340	1800	17	--	2600	15	10
C-08-17 12AAA	360	<5	220	3100	[illegible]	--	1900	6	<10
C-08-17 14DCC	180	<5	210	[illegible]	27	--	2500	11	<10
C-08-18 23CBB	70	<5	440	[illegible]	47	--	4000	42	30
C-08-18 25BAA	140	<5	[illegible]	[illegible]	[illegible]	--	2000	4	<10
C-08-18 28DCC	70	<5	240	[illegible]	23	--	2600	10	<10
C-08-18 34ACC	20	<5	220	[illegible]	18	--	1600	22	<10
C-08-20 03BCB	60	<5	[illegible]	[illegible]	10	--	6400	30	10
C-08-20 15BCD2	50	<5	[illegible]	[illegible]	14	--	2400	8	<10
C-09-18 02AAA	40	<5	[illegible]	[illegible]	47	--	2900	21	10
C-09-19 04BBB	20	<5	240	[illegible]	44	--	2600	13	<10
C-09-19 14AAC	40	<5	[illegible]	[illegible]	[illegible]	--	2400	25	10
C-12-08 35DCA	4	<5	[illegible]	2	5	--	1800	38	68
C-12-08 17ADA	180	<5	[illegible]	[illegible]	27	--	2000	24	<10
C-13-05 25CBD	13	<5	[illegible]	[illegible]	[illegible]	--	370	15	5
C-14-07 35AAD2	<3	<5	17	<1	<1	--	500	13	39
HARQUAHALA BASIN									
[illegible]	16			[illegible]		--	--	--	--
[illegible]	17	--		[illegible]		--	--	--	--
HASSAYAMPA BASIN									
[illegible] 01CDB	3	<5	[illegible]	[illegible]	[illegible]	--	400	6	<3
HUALAPAI VALLEY									
B-22-16 28BDA2	7			[illegible]		--	--	--	--
B-23-13 28CCD	5	<5	[illegible]	[illegible]	[illegible]	--	670	12	9
B-24-12 09AAD	7	<5	[illegible]	[illegible]	[illegible]	--	560	11	<3
B-26-18 03AAA1	[illegible]	--		<1		--	--	--	--
B-29-17 23CCB	[illegible]	--		[illegible]		--	--	--	--
LOWER HASSAYAMPA									
[illegible] 20DAA	21			4		--	--	--	--
LITTLE CHINO VALLEY									
[illegible]	<3	--	--	<1	--	--	--	--	--
[illegible] 34ABB	<3	--	--	[illegible]	--	--	--	--	--
LOWER SANTA CRUZ BASIN									
D-04-19 04DDD	11	--	--	1	--	--	--	--	--
D-05-03 16CCC2	8	--	--	<1	--	--	--	--	--
D-05-07 23DDA	40	--	--	<10	--	--	--	--	--
D-06-03 22DCC	--	--	--	--	--	--	--	--	--
D-06-14N04ABB	12	--	--	<1	--	--	--	--	--
D-06-04S04DDB	5	--	--	1	--	--	--	--	--
D-06-07 15ADC2	<3	--	--	1	--	--	--	--	--
D-07-04W31DAD	11	--	--	<1	--	--	--	--	--
D-07-06 29DDD2	20	--	--	10	--	--	--	--	--
D-07-06 34CDD1	35	--	--	2	--	--	--	--	--
D-09-07 02CDD	10	--	--	<1	--	--	--	--	--
D-09-07 03ADD	5	--	--	<1	--	--	--	--	--
D-10-09 10AAD2	5	--	--	<1	--	--	--	--	--
D-10-10 05DAD	9	--	--	<1	--	--	--	--	--
D-10-10 05DBA	9	--	--	<1	--	--	--	--	--
D-11-11 35DDD	4	--	--	2	--	--	--	--	--
LOWER VERDE RIVER									
A-03-06 15ABA	5	--	--	4	--	--	--	--	--
McMULLEN VALLEY									
B-05-13 11CBB	7	<5	38	2	7	--	1000	20	<3
B-07-09 11AAA	6	--	--	<1	--	--	--	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	STATION NUMBER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
NEW RIVER-CAVE CREEK									
A-04-02 11ADB	334230112070901	03-02-88	425	7.80	28.5	140	28	16	38
A-04-04 06BBB	334332111594201	11-14-87	428	7.70	--	160	31	19	28
A-05-02 03DBC	334803112083201	03-03-88	505	7.60	31.0	81	16	10	87
A-06-04 26DCC	334943111545901	03-23-88	510	7.70	24.5	220	43	27	22
PUERCO-ZUNI									
A-14-26 10CDC	343725109343501	03-17-88	3900	7.00	15.0	910	230	82	510
A-21-27 35ACB1	351047109265001	08- -88	--	--	--	--	--	--	--
A-21-27 35BCD01	351044109270501	08-11-88	--	--	--	240	71	15	150
A-21-27 35BCD02	351044109270502	08-11-88	--	--	--	--	--	--	--
A-21-28 13CBC	351254109194501	08-10-88	--	--	--	320	99	17	140
		08-10-88	--	--	--	--	--	--	--
		08-10-88	--	--	--	--	--	--	--
PEACH SPRINGS CANYON									
B-25-11 02CBC	353444113254901	03-08-88	645	7.50	19.0	300	59	37	20
RANEGRAS PLAIN									
B-03-14 12CCC	333637113394001	07-07-88	1350	7.80	30.0	160	55	4.9	200
B-04-14 04ABD	334320113420601	03-15-88	--	--	--	--	--	--	--
		03-10-88	471	8.50	28.0	13	4.5	0.51	97
B-04-16 19BCB	334040113572101	03-08-88	638	8.00	21.5	88	14	13	110
B-06-15 06CCC	335304113520901	03-10-88	4220	7.80	25.5	990	300	58	440
SACRAMENTO VALLEY									
B-17-18 12ABD	345239114084001	05-19-88	585	7.90	33.0	190	42	21	41
B-21-18 05DBD	351401114132401	05-18-88	530	8.20	38.5	100	25	10	58
SAFFORD BASIN									
D-03-22 25CCD	330813110025701	03-17-88	470	7.50	22.0	210	43	25	18
D-04-22 25BCB	330330110030001	03-17-88	485	7.00	19.0	110	35	5.1	59
D-06-25 36CBB	325200109445601	03-15-88	10800	7.90	46.5	280	100	6.6	2200
D-07-26 15BCC	324926109405201	03-15-88	3750	7.30	19.5	350	100	25	660
D-09-26 18DDA	323852109430601	03-15-88	310	7.00	21.0	110	30	7.6	20
D-10-27 28DCD	323138109350701	03-15-88	360	8.80	25.0	6	2.2	0.02	81
D-01-23 10BDC	332142109583801	08-24-88	210	7.60	--	90	28	7.9	7.8
D-01-25 13BBB2	332110109443401	09-01-88	234	7.90	17.0	110	34	5.8	9.3
D-02-21 25DAC	331338110082901	08-29-88	599	7.50	28.0	170	59	5.2	54
D-03-21 28ABC	330850110114801	08-29-88	476	7.60	23.0	180	47	16	36
D-05-22 30DDD	330809110071301	08-31-88	7000	7.20	20.0	1500	420	100	960
D-03-26 20CAC	330912109421101	08-23-88	348	8.10	22.0	150	32	17	18
D-04-22 26DBD	330311110032201	08-25-88	421	7.00	19.0	98	31	5.0	52
SAN BERNARDINO VALLEY									
D-24-30 14CBD	312026109155201	11-17-87	450	--	--	64	12	8.3	83
SALT RIVER VALLEY									
A-03-01 27CCC	333401112151101	03-02-88	--	--	--	640	160	58	63
B-01-02 25BBC2	332416112253201	03-15-88	2300	8.00	37.0	110	36	4.4	390
B-03-02 14BCB2	333619112263501	08-10-88	397	8.70	42.0	--	1.7	<0.01	81
B-06-03 33DCB	334848112342901	03-03-88	650	8.00	31.0	140	32	14	77
D-01-09 07BDC2	332135111281801	03-01-88	505	9.10	49.0	3	0.98	0.11	110
D-01-10 35DBC	331756111173701	02-29-88	1280	7.20	21.0	620	180	42	49
A-02-05 14AAA	333126111481601	03-22-88	1800	7.60	25.0	390	100	35	220
SAN SIMON BASIN									
D-13-29 25CCC	321552109205101	06-01-88	630	9.40	33.0	4	1.4	0.03	110
		03-14-88	540	--	24.0	170	57	5.7	44
D-18-32 33CAA	314900109045501	03-14-88	225	6.40	20.0	49	15	2.8	24
D-20-32 29ABB	314001109054201	03-14-88	295	7.60	23.5	79	22	5.9	30
D-21-31 03BCD2	313758109104701	07-12-88	380	7.60	27.5	120	35	7.4	33
ST. JOHNS									
A-12-28 19BAD	342548109250301	03-17-88	3500	6.70	18.5	950	280	61	370
A-13-27 13A	343215109252001	03-16-88	1420	8.65	7.5	160	37	16	290
A-14-27 35BDC	343439109270301	03-15-88	1990	7.70	16.0	260	74	19	350

WATER-QUALITY DATA--Continued

LOCAL IDENT-I-FIER	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NEW RIVER-CAVE CREEK										
A-04-02 11ADB	1	3.2	176	9.7	13	1.0	40	271	3.70	<0.010
A-04-04 06BBB	1	2.8	168	13	23	0.40	37	262	1.50	<0.010
A-05-02 03DBC	4	3.9	195	17	14	2.4	54	336	3.30	<0.010
A-06-04 26DCC	0.7	3.4	176	14	23	0.60	0.02	268	5.30	<0.010
PUERCO-ZUNI										
A-14-26 10CDC	8	21	478	660	670	2.0	12	2470	<0.100	<0.010
A-21-27 35ACB1	--	--	--	--	--	--	--	--	--	--
A-21-27 35BCD01	4	3.9	--	280	61	0.60	12	728	<0.100	0.030
A-21-27 35BCD02	--	--	--	--	--	--	--	--	--	--
A-21-28 13CBC	4	1.9	--	310	55	0.60	15	847	1.90	<0.010
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
PEACH SPRINGS CANYON										
B-25-11 02CBC	0.5	2.1	223	2.9	38	0.10	18	349	8.70	<0.010
RANEGRAS PLAIN										
B-03-14 12CCC	7	3.4	112	220	190	2.0	18	790	6.30	<0.010
B-04-14 04ABD	--	--	--	--	--	--	--	--	--	--
B-04-16 19BCB	12	0.30	130	43	30	0.50	15	278	2.00	<0.010
B-06-15 06CCC	5	5.3	270	16	20	0.50	34	392	3.80	<0.010
	6	1.5	70	480	890	1.6	31	2390	33.0	<0.010
SACRAMENTO VALLEY										
B-17-18 12ABD	1	4.0	134	53	61	1.2	33	347	2.20	0.010
B-21-18 05DBD	3	8.2	110	67	42	0.80	49	333	1.50	0.020
SAFFORD BASIN										
D-03-22 25CCD	0.6	6.8	216	7.9	10	2.2	58	306	1.20	<0.010
D-04-22 25BCB	3	1.0	129	46	36	1.6	29	293	0.670	0.030
D-06-25 36CBB	60	9.6	63	740	3200	0.20	50	6350	<0.100	0.010
D-07-26 15BCC	16	7.7	455	420	540	4.0	50	2110	7.70	0.040
D-09-26 18DDA	0.9	1.0	83	46	5.5	0.80	39	209	2.20	<0.010
D-10-27 28BCD	16	0.80	143	16	8.3	6.4	39	240	<0.100	0.020
D-01-23 10BDC	0.4	2.8	--	25	5.1	0.10	51	171	0.900	0.070
D-01-25 13BBB2	0.4	10	--	5.5	2.8	0.20	36	175	0.510	0.030
D-02-21 25DAC	2	6.5	--	9.7	87	1.3	38	357	0.900	<0.010
D-03-21 28ABC	1	1.4	--	31	12	0.20	30	301	0.900	<0.010
D-03-22 30DDD	12	12	--	820	1800	1.2	48	4460	3.80	0.040
D-03-26 20CAC	0.7	2.1	--	7.0	5.5	0.60	31	222	3.00	<0.010
D-04-22 26DBD	2	1.1	--	44	44	1.0	25	263	0.390	0.020
SAN BERNARDINO VALLEY										
D-24-30 14CBD	5	3.0	--	11	10	0.50	34	300	1.00	<0.010
SALT RIVER VALLEY										
A-03-01 27CCC	1	3.7	--	120	190	0.10	34	819	9.30	<0.010
B-01-02 25BBC2	17	5.3	96	160	440	3.6	27	1150	4.60	0.020
B-03-02 14BCB2	--	1.1	99	33	22	4.4	23	--	0.480	<0.010
B-06-03 33DCB	3	3.0	142	82	56	1.6	27	382	0.660	<0.010
D-01-09 07BDC2	29	0.50	155	10	42	0.60	32	313	5.30	<0.010
D-01-10 35DBC	0.9	3.8	254	380	37	0.40	32	878	0.380	<0.010
A-02-05 14AAA	5	6.6	137	110	390	0.40	30	1050	18.0	<0.010
SAN SIMON BASIN										
D-13-29 25CCC	26	0.50	101	100	26	2.7	21	324	0.280	0.020
D-13-29 25CCC	2	1.7	140	77	28	1.4	30	337	1.90	<0.010
D-18-32 33CAA	2	2.3	63	14	11	0.80	61	178	2.10	0.060
D-20-32 29ABB	2	4.5	120	11	5.8	2.3	48	204	0.540	0.010
D-21-31 03BCD2	1	8.0	170	8.3	5.3	1.5	53	256	0.470	<0.010
ST. JOHNS										
A-12-28 19BAD	5	26	601	670	320	2.6	11	2110	<0.100	<0.010
A-13-27 13A	10	6.1	432	260	67	2.2	17	960	1.00	<0.010
A-14-27 35BDC	10	12	316	440	180	1.9	9.0	1280	1.90	0.010

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, HEXA- VALENT, DIS. (UG/L AS CR) (01032)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
NEW RIVER-CAVE CREEK										
A-04-02 11ADB	--	--	--	--	--	80	--	--	--	--
A-04-04 06BBB	--	--	5	8	<0.5	60	<1	<1	1	4
A-05-02 03DBC	--	--	--	--	--	150	--	--	--	--
A-06-04 26DCC	-	--	--	--	--	60	--	--	--	--
PUERCO-ZUNI										
A-14-26 10CDC	--	--	--	--	--	640	--	--	--	--
A-21-27 35ACB1	--	--	--	--	--	--	--	--	--	--
A-21-27 35BCD01	0.09	<10	3	120	--	190	1	1	2	1
A-21-27 35BCD02	--	--	--	--	--	--	--	--	--	--
A-21-28 13CBC	--	<10	1	37	--	190	<1	2	<1	2
	--	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--	--
PEACH SPRINGS CANYON										
B-25-11 02CBC	--	--	--	--	--	90	--	--	--	--
RANEGRAS PLAIN										
B-03-14 12CCC	--	--	2	16	<0.5	690	<1	<1	2	<1
B-04-14 04ABD	--	--	13	<100	<10	--	<1	24	1	<1
	--	--	--	--	--	300	--	--	--	--
B-04-16 19BCB	--	--	--	--	--	380	--	--	--	--
B-06-15 06CCC	--	--	--	--	--	930	--	--	--	--
SACRAMENTO VALLEY										
B-17-18 12ABD	0.03	--	3	4	<0.5	130	1	23	<1	4
B-21-18 05DBD	0.06	--	--	--	--	170	--	37	--	--
SAFFORD BASIN										
D-03-22 25CCD	--	--	<1	8	<0.5	40	<1	4	<1	12
D-04-22 25BCB	0.09	--	--	--	--	50	--	--	--	--
D-06-25 36CBB	0.03	--	--	--	--	1600	--	--	--	--
D-07-26 15BCC	0.12	--	--	--	--	750	--	--	--	--
D-09-26 18DDA	--	--	--	--	--	20	--	--	--	--
D-10-27 28DCD	0.06	--	--	--	--	240	--	--	--	--
D-01-23 10BDC	0.21	<10	1	<2	--	20	1	2	--	--
D-01-25 13BBB2	0.09	<10	2	21	--	10	2	<1	--	--
D-02-21 25DAC	--	<10	<1	6	--	50	2	<1	--	--
D-03-21 28ABC	--	<10	<1	150	--	120	2	1	--	--
D-03-22 30DDD	0.12	10	6	<100	--	900	<1	1	--	--
D-03-26 20CAC	--	<10	1	2	--	30	1	<1	--	--
D-04-22 26DBD	0.06	<10	2	36	--	40	2	2	--	--
SAN BERNARDINO VALLEY										
D-24-30 14CBD	--	<10	2	--	--	60	--	3	--	--
SALT RIVER VALLEY										
A-03-0[illegible] 27CCC	--	--	--	--	--	300	--	--	--	--
B-01-02 25BBC2	0.06	--	--	--	--	710	--	--	--	--
B-03-02 14BCB2	--	--	57	3	<0.5	140	1	8	<1	1
B-06-03 33DCB	--	--	--	--	--	290	--	--	--	--
D-01-09 07BDC2	--	--	--	--	--	70	--	--	--	--
D-01-10 35DBC	--	--	--	--	--	60	--	--	--	--
A-02-05 14AAA	--	--	--	--	--	170	--	--	--	--
SAN SIMON BASIN										
D-13-29 25CCC	0.06	--	--	--	--	100	--	--	--	--
D-13-29 25CCC	--	--	--	--	--	50	--	--	--	--
D-18-32 33CAA	0.18	--	--	--	--	20	--	--	--	--
D-20-32 29ABB	0.03	--	--	--	--	40	--	--	--	--
D-21-31 03BCD2	--	--	1	2	<0.5	20	<1	<1	<1	1
ST. JOHNS										
A-12-28 19BAD	--	--	--	--	--	640	--	--	--	--
A-13-27 13A	--	--	--	--	--	870	--	--	--	--
A-14-27 35BDC	0.03	--	--	--	--	270	--	--	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT-I-FIER	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NEW RIVER-CAVE CREEK									
A-04-02 11ADB	<3	--	--	<1	--	--	--	--	--
A-04-04 06BBB	7	<5	20	130	1	--	450	17	<3
A-05-02 03DBC	<3	--	--	<1	--	--	--	--	--
A-06-04 26DCC	5	--	--	<1	--	--	--	--	--
PUERCO-ZUNI									
A-14-26 10CDC	30	--	--	80	--	--	--	--	--
A-21-27 35ACB1	--	--	--	--	--	--	--	--	--
A-21-27 35BCD01	350	<5	--	3300	20	<1	1000	<1	19
A-21-27 35BCD02	--	--	--	--	--	--	--	--	--
A-21-28 13CBC	9	8	--	31	4	1	940	<1	7
	--	--	--	--	--	--	--	--	--
	--	--	--	--	--	--	--	--	--
PEACH SPRINGS CANYON									
B-25-11 02CBC	7	--	--	4	--	--	--	--	--
RANEGRAS PLAIN									
B-03-14 12CCC	4	<5	110	10	33	--	1200	5	54
B-04-14 04ABD	--	7	10	--	11	--	240	--	20
	45	--	--	4	--	--	--	--	--
B-04-16 19BCB	<3	--	--	1	--	--	--	--	--
B-06-15 06CCC	70	--	--	20	--	--	--	--	--
SACRAMENTO VALLEY									
B-17-18 12ABD	11	<5	11	2	3	--	380	8	4
B-21-18 05DBD	5	--	--	<1	--	--	--	--	--
SAFFORD BASIN									
D-03-22 25CCD	13	<5	220	5	1	--	130	12	93
D-04-22 25BCB	44	--	--	5	--	--	--	--	--
D-06-25 36CBB	100	--	--	100	--	--	--	--	--
D-07-26 15BCC	20	--	--	<10	--	--	--	--	--
D-09-26 18DDA	11	--	--	6	--	--	--	--	--
D-10-27 28DCD	23	--	--	3	--	--	--	--	--
D-01-23 10BDC	67	<5	5	10	--	<1	120	--	--
D-01-25 13BBB2	23	<5	6	68	--	<1	140	--	--
D-02-21 25DAC	57	<5	36	6	--	<1	230	--	--
D-03-21 28ABC	33	<5	29	2	--	1	260	--	--
D-03-22 30DDD	70	<5	410	1900	--	2	4000	--	--
D-03-26 20CAC	15	<5	31	9	--	<1	240	--	--
D-04-22 26DBD	8	<5	96	<1	--	<1	290	--	--
SAN BERNARDINO VALLEY									
D-24-30 14CBD	<3	<5	--	<1	--	<1	--	--	--
SALT RIVER VALLEY									
A-03-01 27CCC	33	--	--	4	--	--	--	--	--
B-01-02 25BBC2	<10	--	--	<10	--	--	1200	--	--
B-03-02 14BCB2	8	<5	40	<1	11	--	67	53	14
B-06-03 33DCB	<3	--	--	4	--	--	--	--	--
D-01-09 07BDC2	4	--	--	<1	--	--	--	--	--
D-01-10 35DBC	<3	--	--	<1	--	--	--	--	--
A-02-05 14AAA	9	--	--	1	--	--	--	--	--
SAN SIMON BASIN									
D-13-29 25CCC	6	--	--	<1	--	--	--	--	--
D-13-29 25CCC	26	--	--	1	--	--	--	--	--
D-18-32 33CAA	21	--	--	2	--	--	--	--	--
D-20-32 29ABB	<3	--	--	<1	--	--	--	--	--
D-21-31 03BCD2	6	<5	34	<1	2	--	190	13	120
ST. JOHNS									
A-12-28 19BAD	12000	--	--	60	--	--	--	--	--
A-13-27 13A	20	--	--	35	--	--	--	--	--
A-14-27 35BDC	110	--	--	6	--	--	--	--	--

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	STATION NUMBER	DATE	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
UPPER SANTA CRUZ BASIN									
D-11-14 32CCC	322526110563301	04-06-88	282	7.30	22.0	97	28	6.6	18
D-12-12 16DDD	322252111065001	03-21-88	970	7.00	24.0	150	47	7.9	34
D-14-14 02BBB	321457110532701	03-07-88	445	7.20	24.0	120	42	4.6	49
D-16-15 14ACB	320238110465[illegible]01	03-07-88	1010	7.50	26.0	400	120	25	66
D-17-14 07DDD	315728110563901	03-07-88	740	7.40	24.0	290	94	13	39
D-19-13 29CBB	314448111023301	03-28-88	960	7.35	30.5	310	97	16	94
D-19-17 17BBD	314719110383001	07-12-88	320	8.60	19.5	19	7.2	0.29	66
D-22-13 27AAB UNSURV	312929110594201	03-28-88	658	7.25	17.5	270	86	14	28
D-22-13 34ADD UNSURV	312818110594501	03-08-88	650	7.10	19.0	260	79	14	41
D-23-17 14CDD	312538110351601	07-12-88	305	7.60	18.5	130	41	7.3	13
D-24-14 05ADB2	312223110554201	03-08-88	640	6.70	20.0	240	77	12	40
UPPER SAN PEDRO BASIN									
D-13-22 33DAC	321526110055701	07-13-88	360	7.60	26.0	100	32	5.4	38
D-16-18 36AAA	320018110271101	03-28-88	346	7.70	23.0	130	43	5.4	16
D-17-20 22DDB	315614110170301	03-29-88	461	7.70	29.0	--	35	<7.6	53
D-17-21 31DCA2	315426110140501	03-30-88	455	8.00	18.0	31	11	0.64	80
D-17-21 31DDA2	315428110134801	03-29-88	1070	7.30	18.0	300	80	24	130
D-18-21 09BBB1	315322110124101	03-29-88	241	8.30	25.5	38	14	0.67	35
D-18-21 10DCB	315244110111101	03-30-88	289	8.30	24.0	31	12	0.27	42
D-18-21 28DBA	315018110120401	03-29-88	228	8.00	25.0	48	18	0.21	23
D-19-19 33BBA	314435110245401	03-28-88	560	7.30	21.0	230	80	7.4	34
D-19-20 30DAA	314501110195901	03-30-88	980	7.20	22.0	480	120	44	21
D-19-21 14AAC	314707110095601	03-29-88	355	7.80	27.0	130	28	15	27
D-20-17 35ABB	313929110344201	03-28-88	350	7.80	21.0	140	39	11	13
D-20-20 16CBB	314142110185401	03-30-88	545	7.50	22.5	240	68	16	24
D-20-21 14BCCUN	314143110104301	03-30-88	415	7.60	22.0	160	47	9.7	30
D-20-22 29ABD	314008110065701	03-29-88	345	7.50	22.0	150	49	7.5	12
D-21-21 11AAC	313728110103101	03-29-88	365	7.70	18.0	150	38	13	17
D-22-20 01BCA	313253110162401	03-16-88	--	--	--	150	45	9.9	12
D-24-21 03AAB	312255110113301	03-16-88	400	7.40	24.0	160	56	5.2	19
D-24-24 05AAB	312245109551701	03-31-88	475	7.80	21.5	180	45	16	21
UPPER SALT RIVER BASIN									
A-01-15 04CBD3	332717110501903	06-16-88	3240	4.19	19.0	--	--	--	--
A-01-15 09DBC1	332629110495801	06-14-88	7790	3.49	18.0	2600	520	320	180
A-01-15 09DBC3	332629110495803	06-14-88	5290	3.51	17.5	--	--	--	--
A-01-15 09DBC4	332629110495804	06-14-88	3180	3.74	18.0	--	--	--	--
A-01-15 09DBC5	332629110495805	06-14-88	4070	6.18	19.0	--	--	--	--
A-01-15 09DCD1	332611110495101	06-13-88	8500	3.71	18.0	--	--	--	--
A-02-15 07BDD1	333151110520501	06-16-88	3710	5.81	18.5	2400	710	160	91
A-02-15 07BDD3	333151110520503	06-16-88	3720	5.69	19.0	--	--	--	--
A-02-15 29DBD3	332904110504803	06-15-88	3260	4.92	19.0	--	--	--	--
A-02-15 29DBD4	332904110504804	06-15-88	460	7.41	19.5	--	--	--	--
UPPER VERDE RIVER									
A-20-07 20CCA	350547111405701	07-05-88	385	7.50	11.0	200	48	20	5.0
WATERMAN WASH									
C-02-01 30DBA	331330112235001	03-21-88	2400	8.00	32.5	130	35	10	420
C-02-02 19AAD	331437112294401	03-17-88	1240	8.40	28.5	46	16	1.5	210
D-04-01 21CCC	330331112161401	03-22-88	1060	7.80	30.0	180	51	13	140
WILLCOX BASIN									
D-09-23 21ABC2	323831109595501	03-28-88	620	7.00	19.0	210	56	18	34
D-13-24 05BAB	322023109551301	03-28-88	510	9.50	46.0	--	1.3	<0.01	110
D-13-25 31CAB2	321533109500701	03-29-88	2300	9.00	32.0	--	1.0	<0.10	480
D-14-25 11CAA	321322109455301	03-14-88	665	7.90	17.0	140	33	15	76
D-14-27 29CDA	321100109364401	03-31-88	855	7.10	19.0	340	91	28	53
D-15-24 06BCD	320936109562401	03-30-88	1870	8.00	22.0	45	13	2.9	370
D-15-24 20CAC	320645109551501	03-14-88	3500	7.50	21.0	1100	240	120	260
D-16-23 19ACB	320155110021601	03-30-88	440	7.50	27.0	200	47	19	16
D-16-24 07BAB	320349109563601	03-30-88	490	7.90	22.0	220	53	22	21
D-16-27 27AAA	320116109343301	03-31-88	350	7.60	20.5	130	43	5.2	25
D-17-26 12CDD	315755109390801	03-31-88	300	7.70	21.0	62	21	2.3	39
D-17-27 30AAD	315557109374001	03-30-88	310	8.10	22.5	58	20	2.0	38
D-17-28 14CCB3	315703109282301	03-15-88	--	7.40	17.0	71	22	4.0	19
D-18-25 05BDA	315408109492201	03-30-88	550	7.50	27.0	170	52	9.3	49
D-18-28 09AAA	315319109292801	03-31-88	175	6.80	14.5	58	16	4.4	9.6
WESTERN MEXICAN DRAINAGE									
C-17-05 17ABC2UNSRV	315702112480401	07-27-88	823	7.80	32.5	130	30	13	120
C-17-07 18DAC	315640113010301	07-27-88	1150	7.70	29.5	120	33	10	190

WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	PHOS- PHOROUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
UPPER SANTA CRUZ BASIN										
D-11-14 32CCC	0.8	1.5	106	16	6.3	0.30	36	183	1.40	0.040
D-12-12 16DDD	1	2.1	194	45	23	0.40	32	324	3.60	<0.010
D-14-14 02BBB	2	1.9	168	31	9.6	0.20	39	289	2.50	0.010
D-16-15 14ACB	1	3.3	188	310	19	0.30	31	693	1.20	<0.010
D-17-14 07DDD	1	3.5	184	110	20	0.30	32	464	9.50	<0.010
D-19-13 29CBB	2	2.9	233	230	22	0.60	38	650	2.00	0.030
D-19-17 17BBD	7	1.1	121	33	3.6	0.40	12	197	<0.100	<0.010
D-22-13 27AAB UNSURV	0.8	2.9	207	110	16	0.50	32	415	0.280	0.150
D-22-13 34ADD UNSURV	1	3.2	217	55	28	0.20	33	394	2.30	0.030
D-23-17 14CDD	0.5	1.7	137	7.8	4.4	0.50	26	188	0.840	<0.010
D-24-14 05ADB2	1	3.4	218	42	24	0.30	37	391	5.10	0.540
UPPER SAN PEDRO BASIN										
D-13-22 33DAC	2	1.5	169	4.7	7.4	0.40	43	237	0.640	<0.010
D-16-18 36AAA	0.6	1.3	113	4.8	16	0.30	30	207	4.30	<0.010
D-17-20 22DDB	--	2.6	176	40	4.4	4.0	33	--	0.400	<0.010
D-17-21 31DCA2	7	2.7	127	49	4.8	8.8	16	253	0.590	<0.010
D-17-21 31DDA2	3	1.7	396	95	24	3.0	40	693	13.0	<0.010
D-18-21 09BBB1	3	1.3	94	8.4	3.3	2.2	26	151	0.650	<0.010
D-18-21 10DCB	3	1.4	81	18	2.6	7.2	27	163	0.720	<0.010
D-18-21 28DBA	2	1.9	80	6.1	3.7	2.8	26	133	0.280	<0.010
D-19-19 33BBA	1	1.2	250	35	8.7	0.60	31	351	0.640	<0.010
D-19-20 30DAA	0.4	3.0	163	360	4.3	0.40	32	688	0.540	<0.010
D-19-21 14AAC	1	1.9	165	5.7	4.3	0.50	27	217	1.90	<0.010
D-20-17 35ABB	0.5	2.1	152	2.0	6.6	0.50	24	203	2.90	<0.010
D-20-20 16CBB	0.7	2.3	232	45	6.4	0.50	26	330	0.360	<0.010
D-20-21 14BCCUN	1	2.1	202	14	4.9	0.30	32	263	0.230	<0.010
D-20-22 29ABD	0.4	1.3	154	11	1.6	0.30	33	219	2.40	<0.010
D-21-21 11AAC	0.6	1.1	172	5.8	3.8	0.30	27	215	1.10	<0.010
D-22-20 01BCA	0.4	0.70	--	6.7	3.3	0.20	30	217	0.350	<0.010
D-24-21 03AAB	0.7	0.90	186	19	6.5	0.30	35	257	0.510	0.010
D-24-24 05AAB	0.7	2.2	150	11	22	0.50	22	270	8.90	<0.010
UPPER SALT RIVER BASIN										
A-01-15 04CBD3	--	--	0	--	--	--	--	--	--	--
A-01-15 09DBC1	2	7.9	0	7000	300	0.30	87	9920	<0.100	--
A-01-15 09DBC3	--	--	0	--	--	--	--	--	--	--
A-01-15 09DBC4	--	--	0	--	--	--	--	--	--	--
A-01-15 09DBC5	--	--	560	--	--	--	--	--	--	--
A-01-15 09DCD1	--	--	0	--	--	--	--	--	--	--
A-02-15 07BDD1	0.8	4.6	118	2300	110	0.30	61	3570	<0.100	--
A-02-15 07BDD3	--	--	93	--	--	--	--	--	--	--
A-02-15 29DBD3	--	--	12	--	--	--	--	--	--	--
A-02-15 29DBD4	--	--	170	--	--	--	--	--	--	--
UPPER VERDE RIVER										
A-20-07 20CCA	0.2	0.60	203	1.9	1.9	0.10	15	217	0.450	0.010
WATERMAN WASH										
C-02-01 30DBA	17	7.4	79	160	470	2.0	19	1220	10.0	<0.010
C-02-02 19AAD	14	4.7	77	120	220	4.0	17	662	5.10	<0.010
D-04-01 21CCC	5	4.5	154	130	140	0.40	27	622	5.20	<0.010
WILLCOX BASIN										
D-09-23 21ABC2	1	0.80	161	60	27	1.1	38	369	8.40	<0.010
D-13-24 05BAB	--	1.3	161	38	13	8.0	73	--	0.350	<0.010
D-13-25 31CAB2	--	4.7	287	230	320	9.6	15	--	0.210	0.040
D-14-25 11CAA	3	1.4	195	48	59	2.1	19	371	0.110	<0.010
D-14-27 29CDA	1	0.60	270	150	22	0.60	26	535	0.150	<0.010
D-15-24 06BCD	25	5.2	256	180	290	12	32	1060	0.580	0.020
D-15-24 20CAC	4	7.3	135	430	740	0.40	25	1910	1.70	<0.010
D-16-23 19ACB	0.5	1.7	193	25	8.0	1.0	20	260	1.20	<0.010
D-16-24 07BAB	0.6	1.7	182	60	9.2	0.50	23	305	1.10	<0.010
D-16-27 27AAA	1	1.6	158	18	4.1	0.40	33	233	1.80	<0.010
D-17-26 12CDD	2	1.8	107	12	13	3.2	35	199	1.70	<0.010
D-17-27 30AAD	2	1.6	113	18	4.1	4.0	39	199	0.880	<0.010
D-17-28 14CCB3	1	1.3	50	57	6.4	0.40	44	185	0.220	<0.010
D-18-25 05BDA	2	3.8	156	100	13	1.1	22	350	1.30	<0.010
D-18-28 09AAA	0.6	0.80	38	37	2.2	0.20	26	119	<0.100	<0.010
WESTERN MEXICAN DRAINAGE										
C-17-05 17ABC2UNSRV	5	4.6	162	60	110	2.0	61	518	4.40	0.010
C-17-07 18DAC	8	4.8	251	87	150	4.3	40	683	2.70	<0.010

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4) (00660)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, HEXA- VALENT, DIS. (UG/L AS CR) (01032)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)
UPPER SANTA CRUZ BASIN										
D-11-14 32CCC	0.12	--	<1	38	<0.5	20	<1	<1	1	4
D-12-12 16DDD	--	--	--	--	--	50	--	--	--	--
D-14-14 02BBB	0.03	--	--	--	--	30	--	--	--	--
D-16-15 14ACB	--	--	--	--	--	90	--	--	--	--
D-17-14 07DDD	--	--	--	--	--	50	--	--	--	--
D-19-13 29CBB	0.09	--	5	31	<0.5	170	<1	<1	1	6
D-19-17 17BBD	--	--	7	36	<0.5	190	2	<1	1	1
D-22-13 27AAB UNSURV	0.46	--	--	--	--	50	--	--	--	--
D-22-13 34ADD UNSURV	0.09	--	4	70	<0.5	70	<1	<1	2	9
D-23-17 14CDD	--	--	4	370	<0.5	20	<1	1	1	5
D-24-14 05ADB2	1.7	--	--	--	--	90	--	--	--	--
UPPER SAN PEDRO BASIN										
D-13-22 33DAC	--	--	1	7	<0.5	50	1	2	1	<1
D-16-18 36AAA	--	--	2	230	<0.5	20	<1	<1	1	6
D-17-20 22DDB	--	--	27	170	<0.5	60	<1	<1	1	6
D-17-21 31DCA2	--	--	19	51	<0.5	230	<1	<1	<1	9
D-17-21 31DDA2	--	--	--	--	--	380	--	--	--	--
D-18-21 09BBB1	--	--	10	54	<0.5	60	<1	<1	1	4
D-18-21 10DCB	--	--	15	21	<0.5	370	3	6	<1	5
D-18-21 28DBA	--	--	2	110	<0.5	30	<1	1	<1	3
D-19-19 33BBA	--	--	1	100	<0.5	30	<1	<1	<1	3
D-19-20 30DAA	--	--	2	19	<0.5	40	2	<1	<1	6
D-19-21 14AAC	--	--	2	140	<0.5	70	<1	<1	<1	8
D-20-17 35ABB	--	--	<1	52	<0.5	30	<1	<1	1	11
D-20-20 16CBB	--	--	2	44	<0.5	60	<1	<1	2	4
D-20-21 14BCCUN	--	--	2	100	<0.5	50	<1	<1	<1	6
D-20-22 29ABD	--	--	1	190	<0.5	30	<1	<1	1	3
D-21-21 11AAC	--	--	<1	270	<0.5	20	<1	<1	1	6
D-22-20 01BCA	--	--	--	--	--	10	--	--	--	--
D-24-21 03AAB	0.03	--	--	--	--	20	--	--	--	--
D-24-24 05AAB	--	--	2	250	<0.5	120	<1	<1	1	28
UPPER SALT RIVER BASIN										
A-01-15 04CBD3	--	--	--	--	--	--	--	--	--	--
A-01-15 09DBC1	--	200000	3	300	130	470	280	--	1300	120000
A-01-15 09DBC3	--	--	--	--	--	--	--	--	--	--
A-01-15 09DBC4	--	--	--	--	--	--	--	--	--	--
A-01-15 09DBC5	--	--	--	--	--	--	--	--	--	--
A-01-15 09DCD1	--	--	--	--	--	--	--	--	--	--
A-02-15 07BDD1	--	10	1	30	<1	60	5	--	10	<30
A-02-15 07BDD3	--	--	--	--	--	--	--	--	--	--
A-02-15 29DBD3	--	--	--	--	--	--	--	--	--	--
A-02-15 29DBD4	--	--	--	--	--	--	--	--	--	--
UPPER VERDE RIVER										
A-20-07 20CCA	0.03	--	2	240	<0.5	<10	<1	<1	2	1
WATERMAN WASH										
C-02-01 30DBA	--	--	--	--	--	1000	--	--	--	--
C-02-02 19AAD	--	--	--	--	--	470	--	--	--	--
D-04-01 21CCC	--	--	3	52	<0.5	330	<1	6	<1	8
WILLCOX BASIN										
D-09-23 21ABC2	--	--	<1	40	<0.5	30	<1	<1	<1	16
D-13-24 05BAB	--	--	--	--	--	130	--	--	--	--
D-13-25 31CAB2	0.12	--	57	<100	<10	460	2	7	1	13
D-14-25 11CAA	--	--	--	--	--	70	--	--	--	--
D-14-27 29CDA	--	--	<1	89	<0.5	40	<1	<1	<1	22
D-15-24 06BCD	0.06	--	110	13	<0.5	260	<1	7	<1	16
D-15-24 20CAC	--	--	--	--	--	70	--	--	--	--
D-16-23 19ACB	--	--	1	160	<0.5	30	<1	<1	<1	19
D-16-24 07BAB	--	--	1	87	<0.5	40	<1	<1	<1	14
D-16-27 27AAA	--	--	1	49	<0.5	50	<1	<1	<1	30
D-17-26 12CDD	--	--	2	13	<0.5	50	1	1	<1	18
D-17-27 30AAD	--	--	3	5	<0.5	40	2	<1	<1	35
D-17-28 14CCB3	--	--	--	--	--	20	--	--	--	--
D-18-25 05BDA	--	--	8	49	<0.5	110	<1	<1	<1	19
D-18-28 09AAA	--	--	<1	13	<0.5	20	1	<1	<1	19
WESTERN MEXICAN DRAINAGE										
C-17-05 17ABC2UNSRV	0.03	--	6	4	<0.5	390	<1	<1	<1	1
C-17-07 18DAC	--	--	13	25	<0.5	650	<1	<1	2	2

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT- I- FIER	IRON, DIS- SOLVED (UG/L AS FE) (01046)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO) (01060)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	STRON- TIUM, DIS- SOLVED (UG/L AS SR) (01080)	VANA- DIUM, DIS- SOLVED (UG/L AS V) (01085)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
UPPER SANTA CRUZ BASIN									
D-11-14 32CCC	9	<5	<4	<1	1	--	190	5	4
D-12-12 16DDD	<3	--	--	1	--	--	--	--	--
D-14-14 02BBB	85	--	--	<1	--	--	--	--	--
D-16-15 14ACB	32	--	--	9	--	--	--	--	--
D-17-14 07DDD	<3	--	--	3	--	--	--	--	--
D-19-13 29CBB	23	<5	22	2	7	--	530	7	26
D-19-17 17BBD	45	<5	59	13	1	--	100	<1	6
D-22-13 27AAB UNSURV	<3	--	--	1	--	--	--	--	--
D-22-13 34ADD UNSURV	10	<5	13	14	5	--	430	3	<3
D-23-17 14CDD	29	<5	8	2	<1	--	310	9	35
D-24-14 05ADB2	<3	--	--	<1	--	--	--	--	--
UPPER SAN PEDRO BASIN									
D-13-22 33DAC	31	<5	56	11	1	--	240	2	110
D-16-18 36AAA	5	<5	13	<1	1	--	240	6	400
D-17-20 22DDB	<3	<5	59	<1	4	--	<1100	9	<19
D-17-21 31DCA2	49	<5	150	3	13	--	690	14	290
D-17-21 31DDA2	<3	--	--	13	--	--	--	--	--
D-18-21 09BBB1	5	<5	48	<1	3	--	430	10	4
D-18-21 10DCB	59	<5	73	5	3	--	290	13	57
D-18-21 28DBA	5	<5	54	<1	2	--	1800	2	<3
D-19-19 33BBA	8	<5	61	<1	2	--	660	<1	37
D-19-20 30DAA	100	<5	58	5	5	--	3300	4	140
D-19-21 14AAC	5	<5	39	6	2	--	370	5	160
D-20-17 35ABB	12	<5	21	2	2	--	400	6	64
D-20-20 16CBB	6	<5	57	1	2	--	690	3	10
D-20-21 14BCCUN	4	<5	34	<1	1	--	500	5	29
D-20-22 29ABD	6	<5	19	<1	3	--	370	3	160
D-21-21 11AAC	6	<5	21	11	2	--	400	10	150
D-22-20 01BCA	<3	--	--	<1	--	--	--	--	--
D-24-21 03AAB	<3	--	--	<1	--	--	--	--	--
D-24-24 05AAB	46	<5	38	10	2	--	500	2	410
UPPER SALT RIVER BASIN									
A-01-15 04CBD3	--	--	--	--	--	--	--	--	--
A-01-15 09DBC1	1100000	--	450	60000	<1	2	1600	45	15000
A-01-15 09DBC3	--	--	--	--	--	--	--	--	--
A-01-15 09DBC4	--	--	--	--	--	--	--	--	--
A-01-15 09DBC5	--	--	--	--	--	--	--	--	--
A-01-15 09DCD1	--	--	--	--	--	--	--	--	--
A-02-15 07BDD1	22	<30	220	57000	<30	<1	2500	<18	3[illegible]
A-02-15 07BDD3	--	--	--	--	--	--	--	--	--
A-02-15 29DBD3	--	--	--	--	--	--	--	--	--
A-02-15 29DBD4	--	--	--	--	--	--	--	--	--
UPPER VERDE RIVER									
A-20-07 20CCA	3	<5	6	<1	1	--	100	2	16
WATERMAN WASH									
C-02-01 30DBA	20	--	--	<10	--	--	--	--	--
C-02-02 19AAD	6	--	--	4	--	--	--	--	--
D-04-01 21CCC	20	6	58	2	4	--	580	14	6
WILLCOX BASIN									
D-09-23 21ABC2	160	<5	14	6	2	--	250	1	180
D-13-24 05BAB	4	--	--	<1	--	--	--	--	--
D-13-25 31CAB2	<10	<5	240	[illegible]	37	--	<10	6	<10
D-14-25 11CAA	29	--	--	[illegible]	--	--	--	--	--
D-14-27 29CDA	5	<5	17	<1	4	--	650	1	71
D-15-24 06BCD	110	<5	200	4	13	--	250	77	56
D-15-24 20CAC	50	--	--	10	--	--	--	--	--
D-16-23 19ACB	<3	<5	21	<1	4	--	890	3	23
D-16-24 07BAB	7	<5	20	2	4	--	550	3	71
D-16-27 27AAA	37	<5	14	<2	1	--	230	3	100
D-17-26 12CDD	49	<5	38	18	8	--	130	3	54
D-17-27 30AAD	5	<5	40	<1	6	--	110	4	5
D-17-28 14CCB3	5	--	--	3	--	--	--	--	--
D-18-25 05BDA	18	<5	120	2	4	--	470	3	140
D-18-28 09AAA	23	<5	<4	5	1	--	73	<1	22
WESTERN MEXICAN DRAINAGE									
C-17-05 17ABC2UNSRV	15	<5	52	1	10	--	400	17	21
C-17-07 18DAC	36	18	96	1	17	--	450	23	<3

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT-I-FIER	STATION NUMBER	DATE	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
YUMA									
C-08-20 25CBB	324158114164101	07-12-88	5600	7.60	23.0	1100	260	110	890
C-08-22 13BDD2	324410114281501	07-13-88	6200	7.30	22.5	1300	300	140	980
C-08-22 18CBD	324358114333701	07-15-88	3600	7.60	23.0	770	190	70	510
C-08-22 25DDD	324159114273901	07-13-88	3280	7.60	22.0	470	100	54	580
C-08-22 27DDD	324158114294301	07-13-88	4600	7.60	22.0	740	160	81	740
C-08-22 28CCC	324158114314501	07-11-88	3800	7.60	22.5	610	140	63	590
C-08-22 35CCB3	324115114293701	07-14-88	2460	7.60	23.5	470	110	46	310
C-08-23 29ADA	324234114375901	07-15-88	2950	7.60	27.5	540	120	57	470
C-08-23 35AAC	324143114350601	07-11-88	4010	7.60	25.0	760	180	74	620
C-08-24 27ABA2	324244114422401	07-13-88	2050	7.90	24.5	590	160	46	220
C-09-21 09CAA1	323946114250601	07-14-88	1160	7.50	28.0	280	68	26	120
C-09-23 03CAC	324026114363401	07-14-88	2700	7.50	24.5	600	150	55	370
C-09-23 08AAC	324000114380601	07-13-88	2950	7.70	25.5	520	130	47	480
C-09-23 20BAB3	323824114384201	07-13-88	2600	7.70	26.5	500	130	43	350
C-09-23 24CDD2	323735114342401	07-14-88	2000	7.70	23.5	390	96	37	290
C-09-23 29DDC	323643114380501	07-14-88	2050	7.90	24.0	220	51	22	360
C-09-24 11BAD	323958114413401	07-13-88	5100	7.70	24.5	830	190	85	950
C-10-23 11DCD	323404114350601	07-11-88	2150	7.70	27.0	360	91	32	310
C-10-23 28CBC	323137114375101	07-14-88	2300	7.70	31.5	500	140	35	260
C-10-24 12BCC	323430114405801	07-12-88	2550	7.60	25.5	590	150	51	300
C-10-25 02CDA	323505114474201	07-12-88	2000	7.60	22.0	610	160	50	190
C-11-25 02BBB	323027114480301	07-12-88	2350	7.80	24.5	780	210	61	220

WATER-QUALITY DATA--Continued

LOCAL IDENT-I-FIER	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT WH TOT FET FIELD MG/L AS CACO3 (00410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHOROUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
YUMA										
C-08-20 25CBB	12	8.5	468	950	1100	0.90	32	3640	0.240	0.030
C-08-22 13BDD2	12	11	355	1200	1400	0.40	32	4290	<0.100	0.010
C-08-22 18CBD	8	6.4	384	460	750	0.60	21	2240	<0.100	<0.010
C-08-22 25DDD	12	6.2	424	700	430	1.0	32	2180	5.00	0.080
C-08-22 27DDD	12	8.5	263	560	1100	0.90	25	2860	1.40	0.050
C-08-22 28CCC	11	2.1	250	390	870	0.80	27	2240	<0.100	0.030
C-08-22 35CCB3	6	5.6	181	180	580	0.70	28	1370	0.210	0.150
C-08-23 29ADA	9	8.1	224	660	450	0.50	26	1950	4.30	<0.010
C-08-23 35AAC	10	7.0	258	890	710	0.60	25	2670	0.980	<0.010
C-08-24 27ABA2	4	4.6	236	510	240	0.30	25	1350	<0.100	0.010
C-09-21 09CAA1	3	5.5	145	55	240	0.20	24	637	2.10	<0.010
C-09-23 03CAC	7	4.4	186	580	460	1.0	24	1760	0.550	<0.010
C-09-23 08AAC	9	5.6	221	820	360	0.70	24	2010	0.560	<0.010
C-09-23 20BAB3	7	5.2	228	540	370	0.70	25	1600	0.110	<0.010
C-09-23 24CDD2	7	3.6	236	530	180	0.60	27	1320	3.80	<0.010
C-09-23 29DDC	11	3.5	217	490	210	1.0	24	1290	0.300	0.110
C-09-24 11BAD	15	6.2	423	1700	600	0.60	24	3810	<0.100	<0.010
C-10-23 11DCD	7	4.4	152	390	350	0.60	21	1300	2.30	<0.010
C-10-23 28CBC	5	5.1	130	180	560	0.20	20	1280	0.710	<0.010
C-10-24 12BCC	6	5.2	219	350	480	0.30	27	1500	<0.100	<0.010
C-10-25 02CDA	3	4.4	328	340	270	0.30	24	1240	<0.100	<0.010
C-11-25 02BBB	4	4.9	278	470	360	0.20	23	1520	<0.100	<0.010

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT-I-FIER	PHOS-PHATE, ORTHO, DIS-SOLVED (MG/L AS PO4) (00660)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) (01032)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
YUMA										
C-08-20 25CBB	0.09	--	23	100	<10	1100	<1	2	<1	2
C-08-22 13BDD2	0.03	--	14	100	<10	890	1	1	<1	<1
C-08-22 18CBD	--	--	6	<100	<10	440	1	1	<1	1
C-08-22 25DDD	0.25	--	13	100	<10	940	<1	<1	1	5
C-08-22 27DDD	0.15	--	11	100	<10	890	<1	3	1	2
C-08-22 28CCC	0.09	--	22	200	<10	740	<1	2	<1	2
C-08-22 35CCB3	0.46	--	5	200	<10	350	<1	1	1	6
C-08-23 29ADA	--	--	<1	<100	<10	740	<1	1	<1	<1
C-08-23 35AAC	--	--	7	<100	<10	740	<1	1	<1	<1
C-08-24 27ABA2	0.03	--	<1	<100	<10	220	1	<1	<1	1
C-09-21 09CAA1	--	--	1	580	<0.5	190	1	1	<1	1
C-09-23 03CAC	--	--	2	<100	<10	440	2	<1	<1	1
C-09-23 08AAC	--	--	1	100	<10	740	<1	<1	<1	2
C-09-23 20BAB3	--	--	3	<100	<10	440	2	2	<1	1
C-09-23 24CDD2	--	--	5	26	<0.5	300	<1	<1	<1	3
C-09-23 29DDC	0.34	--	3	<100	<10	360	<1	1	<1	1
C-09-24 11BAD	--	--	1	<100	<10	1100	1	<1	<1	<1
C-10-23 11DCD	--	--	2	<100	<10	400	<1	1	2	2
C-10-23 28CBC	--	--	4	200	<10	360	1	<1	<1	1
C-10-24 12BCC	--	--	2	200	<10	290	<1	<1	1	<1
C-10-25 02CDA	--	--	<1	100	<0.5	200	<1	<1	2	<1
C-11-25 02BBB	--	--	<1	<100	<10	260	<1	1	<1	<1

< Actual value is known to be less than value shown.

WATER-QUALITY DATA--Continued

LOCAL IDENT-I-FIER	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
YUMA									
C-08-20 25CBB	180	<5	240	2600	25	--	3200	17	<10
C-08-22 13BDD2	650	<5	300	3700	9	--	4000	23	<10
C-08-22 18CBD	130	<5	150	1600	6	--	2000	9	<10
C-08-22 25DDD	20	<5	190	1000	16	--	1100	14	20
C-08-22 27DDD	20	<5	190	1300	9	--	1800	20	10
C-08-22 28CCC	20	<5	150	7100	13	--	1400	13	10
C-08-22 35CCB3	20	<5	150	620	3	--	1100	14	<10
C-08-23 29ADA	80	<5	90	600	4	--	2100	8	70
C-08-23 35AAC	180	<5	140	1200	15	--	2200	11	10
C-08-24 27ABA2	10	16	70	770	5	--	1500	2	<10
C-09-21 09CAA1	15	<5	65	4	<1	--	1500	8	7
C-09-23 03CAC	20	<5	120	90	16	--	1800	7	40
C-09-23 08AAC	20	<5	110	280	30	--	1800	5	<10
C-09-23 20BAB3	100	<5	100	370	13	--	1500	4	<10
C-09-23 24CDD2	6	<5	160	2	3	--	890	5	<3
C-09-23 29DDC	30	<5	140	<10	6	--	890	7	<10
C-09-24 11BAD	160	<5	210	720	18	--	2400	7	<10
C-10-23 11DCD	10	<5	110	20	7	--	830	5	10
C-10-23 28CBC	10	<5	100	70	5	--	2100	7	<10
C-10-24 12BCC	80	<5	100	590	7	--	1800	5	<10
C-10-25 02CDA	210	<5	66	800	4	--	1900	3	<3
C-11-25 02BBB	100	<5	70	760	6	--	2100	3	40

< Actual value is known to be less than value shown.

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